Construction News

PRICES AND BUSINESS CONDITIONS.

Although for a number of months past business in all lines affected by the war has been rushed, it is safe to say at this time that the foreign demand no longer overshadows domestic requirements. Even those lines of business that are last to feel the effects of good times are now busy, and in a great many cases with more orders than they can handle.

Prices for steel, iron and other metals are still advancing, with the high mark still to come. Some of the mills are sold so far ahead they are refusing any new foreign business in an effort to take care of the domestic trade. Outputs of record proportions are not sufficient to fill orders, and under the circumstances making deliveries is more important than getting new business. Tin plate for 1916 has advanced 40c. a box. Plates command a premium in most cases for prompt shipment. Dealers in black and galvanized sheets are sold so far ahead that one concern has been notified by their mill to accept no more orders before Aug., 1916, delivery. Coke is a little easier for prompt shipment than it has been, although lack of labor seems to be a serious handicap to any better conditions at present.

Scarcity of transports and lack of vessels for exporting are still tying up the supply of cars on the railroads, one of the western roads unloading all its cars either in St. Louis or Kansas City, in order to relieve the shortage west of that point. The railroads have placed orders with the car shops for over, 80,000 cars, and it is estimated that there are inquiries for about 60,000 more, the placing of which will be dependent on the builders getting the amount of steel necessary to build them. Orders for over 300,000 tons of rail were placed by the roads in November, and there are inquiries outstanding for at least 150,000 tons more. The railroads are showing a marked increase, both in their gross and net earnings. In the second week in November there was an increase of 25.7 per cent. in the gross earnings of the railroads which sent in their statements, and net earnings show an increase of between 20 and 25 per cent. This is not confined to any particular part of the country, but is general in all sections.

The lumber industry, which has been one of the last to be affected by good times, is now very busy, particularly in the case of yellow pine, which has advanced over $2 per thousand in the past six weeks. The railroads and car companies are buying liberally, and there is a good export demand. Dealers are expecting a large volume of business when the building season opens in the spring. The paint industry, which follows with the lumber business, is correspondingly busy, and the manufacturers are not accepting any future orders at prevailing prices, and are prophecying a considerable advance for 1916.

A marked improvement in the condition of the labor market during October and November, in spite of the greatly increased demand, is noticed. While unemployment has shown further decreases, the demand for labor has spread to practically all basic industries instead of being confined to munition plants and the metal working trade. It would seem that with the advance in prices of all building materials concerns would be somewhat cautious about doing any new building at the increased cost, but this does not seem to hold true. As the prices steadily increase we note a marked increase in building permits and sales of bonds for public work all over the country.

Official figures from Canada explain that the yield of Canadian wheat for this year was underestimated by more than 100,000,000, bushels, making a total of about 300,000,000 bushels from Canada alone. The British Government has attempted to forestall any cornering of the market in raising of prices by seizing the wheat in some of the Eastern elevators for which they are to pay the owners a fair price. It is understood that both in the United States and Canada that the 1916 grain crop will not be as heavy as this year. The immense yield of the present season and the consequent reduction of prices will have a tendency to discourage extraordinarily large seedings. The lateness and immensity of the small grain crop have made it almost impossible for farmers to get in the usual amount of their fall plowing, and consequently they are not in position, even if they would, to plant the crops next year that they have had this year. This is in marked contrast to conditions prevailing a year ago when the price of wheat was high, and the lateness of the season permitted the farmer to prepare an extra large acreage for planting.

The Crop Reporting Board of the Department of Agriculture in a statement issued in connection with, but not made a part of the official report, shows a table comparing the production of this year with three previous years, showing that 1915 is ahead on production of everything with the exception of corn, which was larger in 1912. The five leading cereals give collectively a yield of some 358,000,000 bushels greater than any previous annual yield, and based on November 1 prices against 1914, are of value about $155,000,000 more than last year.

Business failures as reported by Bradstreet for the weeks of November 18 and 25 are less than they were in 1914. For the week of Nov. 25 reporting 295, and Nov. 18, 389. About 86% of the total number, were less than $5,000, and 9% under $20,000 which leaves 5% of the failures over $20,000.

Money is very plentiful. In the past few days loans amounting to something like $206,000,000 having been announced in Wall Street. Part of these are domestic, and the balance the foreign powers. Russia has practically concluded negotiations for a $60,000,000 loan and the London banks have completed their loan of $50,000,000, the balance of the $206,000,000 having been loaned to different railroads throughout the country, most of it for much needed improvements.

CEMENT, STONE AND GRAVEL

Sand and Gravel—Local dealers say that business is still very good, and is considerably better than it has been for a number of years, although the volume of business has not seemed to have affected prices over the last two or three months. Sand is quoted at 45c. per cy.yd., some dealers asking 40c. on large orders. Gravel prices are as follows: Subway, 95c. per cu.yd., and paving, 75c. per cu.yd.; 1½-in. gravel, 80c. per cu.yd., and ¾-in. gravel at 85c. per cu.yd These quotations are for full cargo lots of 500 cu.yd., delivered alongside of docks, New York.

Portland Cement—Business particularly in the Eastern cement manufacturing zones has showed an increase of fully 50% over November, 1914, although during that period of last year business was not normal. Prices are still holding very stiff, and some of the mills are so far sold up that they are not soliciting orders for 1916 business. Prices are as follows:

New York	$1.27	Milwaukee	$1.48
Jersey City	1.21	Minneapolis	1.58
Boston	1.42	St. Paul	1.58
Chicago	1.31	Duluth	1.56
Pittsburgh	1.41	Peoria	1.39
Cleveland	1.45	Cedar Rapids	1.50
Detroit	1.40	Davenport	1.40
Indianapolis	1.44	Denver	2.28
Toledo	1.44	San Francisco	2.30

The above prices are exclusive of package and for carload lots f.o.b. cars at places named. To contractors 45c. is added to the above figures, including charge for buying. To dealers 40c. is added to the above figures.

Bluestone—During the early part of the month there seemed to be a great deal of price cutting among the different dealers which to some extent was brought about by close competition. Greater efforts were made by some of the important dealers to get new customers, and as a result this necessitated some price cutting in order for some of the interests to retain their present customers. The outlook at present is more optimistic than a month ago, and business has shown considerable improvement. At present prices are more firm than in the past few months, and are as follows:

Bronx flagging 17c. per sq.ft.; Manhattan, 18c. per sq.ft.; curbing, 5x16 in., 40c. per lin.ft.; 5x20 in., 45c. per lin.ft.; sewer bottoms, 5x5 ft. by 3 in., 25c. per sq.ft.; Belgian bridging, 5x24 in., 65c. per lin.ft.

Crushed Stone—Business still continues good; prices holding about the same as a month ago. For 1½-in., price ranges from 80 to 90c. and on ¾-in. from 90c. to $1. There is an indication of an advance in price if the continued scarcity of barges is not relieved. Most of the deliveries now being made are contracts signed up several months ago, and dealers are experiencing great difficulty in the delivering. Ordinarily, barges could be had for about $6 and now they are very hard to get for $10, on account of so many of the railroads storing freight on them, waiting for steamers to arrive. Dealers in the Boston report practically the same prices, together with the same difficulties in delivering.

IRON AND STEEL

Pig Iron—With production at probably the greatest capacity on record, and new business pouring in at an exceptionally heavy rate, prices have made conspicuous advances several times during the past month. The mills have been strained to such an extent that at present efforts are now being made to construct additions to the shops as well as build new furnaces. Buyers are so eager to place orders that they are offering premiums on the more important contracts. In anticipation of continued activity the United States Steel Corporation has already chartered a number of vessels for the delivery of ore for 1916. Orders now arriving at the mill call for, in some cases, delivery for the second half of the year of 1916. Prices in the Pittsburgh District have advanced $1 per ton. Basic is now selling at $16.25 and Bessemer at $17.95. It is reported that a few sales have been made at higher figures but such sales are unconfirmed. In Chicago, the activity is even more marked than a month ago, and prices have shown decided advances over that period. The following prices are f.o.b. furnace, and for the switching charge the average is 50c. per ton: Northern Foundry No. 1 sells at $18 and No. 2 at $17.50. These prices, of course, are well maintained. In the Birmingham District prices have advanced and the demand for foundry iron is exceptionally good. Southern Foundry No. 2 sells at $13.50 to $14, and No. 1 from $14 to $14.50. These prices are for delivery f.o.b. furnace.

In New York purchases have been more numerous than a month ago and prices have shown a decided advance. Northern Foundry No. 2 plain is now quoted at $17.25 to $17.50. No.

2X at $17.75 to $18. Southern Iron is $18.25 to $18.50 for No. 1 and $17.75 to $18.25 for No. 2 Foundry and No. 2 soft. Cincinnati prices are as follows: No. 2 Southern $16.40 to $16.90, Cincinnati Southern Foundry No. 2 is selling at $16.40 to $16.90. Cincinnati Northern Foundry No. 2 at $17.76 to $18.26.

Track Supplies—Along with the general demand for steel rails and other railroad supplies, the call for spikes has been excessive. Prices have advanced considerably in the past month. One of the most recent orders placed was that by the Erie R.R. calling for 22,000 kegs. Railroad spikes f.o.b. Pittsburgh sell at $2 per 100 lb. for delivery in the first quarter, and small railroad spikes are $2.10 to $2.25. Track bolts now sell at $2.50 per 100 lb. and tie plates at $34 to $35 per ton. Standard section angle bars are selling at $1.50 to $1.75.

Steel Rails—Although most of the larger interests have already placed their orders for 1916 rails, still a number of small orders are being received calling for 300 to 1,000 tons. The demand for light rails is still very good, and the lumbering interests, as well as the coal operators, have placed considerable business with the mills. Standard section bessemer rails are quoted at $1.25; openhearth rails, $1.34; light rails, 8 to 10 lb., $1.60; light rails, 8 lb., $1.49; light rails, 12 to 14 lb., $1.55; light rails, 12 lb., $1.44; light rails, 16 to 20 lb., $1.50; light rails, 25 to 45 lb., 1.45. These prices are per 100 lb. f.o.b. Pittsburgh in carload or larger lots. For less than carload lots 5c. per 100 lb. extra is charged.

Structural Material—Although in the building line the demand for structural material has not been so apparent as during the month previous, the call for structural material has in no sense diminished. Car builders have entered the market and have placed very generous orders. Several advances have been made during the month, but had no effect in curtailing the demand. Mills are about sold up and have been postponing deliveries in a great many cases. Prices, as a result of course, are very steady, and beams and channels up to 15 in. are quoted at $1.70 f.o.b. mills. For prompt deliveries 2c. and over has been paid. The above quotation includes beams up to 15 in., channels 3 to 15 in., and angles 3 to 6 in.; tees 3 in. and over. Cutting to specified lengths is charged at the following rates: 2 to 3 ft. inclusive, 25c.; 2 ft. to 1 ft., 50c.; under 1 ft., $1.50. No charge is made for cutting to specified lengths over 3 ft. This price in Chicago is equivalent to $1.89 to $1.99; in Philadelphia, $1.859 to $1.909; in New York, $1.869 to $1.919; in San Francisco, $2.05.

Pipe—Since last month's issue, the price on black pipe has increased 1% and present indications favor a further advance. At present the following prices are firmly held.

On carload lots f.o.b. Pittsburgh the following discounts hold:

	Black	Galvanized
¾ to 2-in. steel, butt welded	78%	63½%
2½ to 6-in. steel lap welded	77%	62½%
7 to 12-in. steel lap welded	75%	58½%

At this rate prices are as follows:

Diameter	Cents Black	Cents Galvanized	Diameter	Cents Black	Cents Galvanized
¾-in.	2.53	4.19	5-in.	34.04	55.50
1-in.	3.74	6.30	6-in.	44.16	72.00
1¼-in.	5.06	8.39	7-in.	59.50	98.77
1½-in.	6.05	10.02	8-in.	62.50	$1.03
2-in.	8.15	12.55	9-in.	86.25	1.43
2½-in.	13.45	21.92	10-in.	$1.03	1.70
3-in.	17.59	28.68	11-in.	1.16	1.92
4-in.	25.07	40.87	12-in.	1.27	2.10

Sheets—The phenomenal demand for black galvanized sheets caused several advances in price during the month and the mills are so well booked with orders that deliveries in most cases are not promised before April. One of the more important factors in this line refuses to quote for delivery prior to August. Quotations given below are for large lots f.o.b. Pittsburgh and small lots New York:

	Cents per Pound: Large Lots Pittsburgh Black	Large Lots Pittsburgh Galv.	Warehouse Delivery New York Black	Warehouse Delivery New York Galv.
No. 10	2.05	3.25	2.55	....
No. 12	2.05	3.35	2.55	4.15
No. 14	2.10	3.35	2.60	4.15
Nos. 18 and 20	2.20	3.60	2.80	4.40
Nos. 22 and 24	2.25	3.80	2.85	4.55
No. 26	2.30	3.95	2.90	4.70
No. 27	2.35	4.10	2.80	4.85
No. 28	2.40	4.25	3.00	5.00

Cast-Iron Pipe—Quite a number of fair-sized contracts for water pipes have turned up during the month, and several large gas companies have entered the market for considerable supply. Due somewhat to the war business in this country, a number of companies have been forced to make extensions to existing lines. Increased cost of raw materials along with the improvement in business has caused an advance in the price per ton over last month, and in New York we quote carload lots of 6-in. Class B and heavier at $27 per net ton Tidewater; Class A and gas pipe at $28 per ton. Birmingham f.o.b. makers' yard per net ton as follows: 4-in., $23.50; 6-in. and upward, $21.50; gas pipe, $1 per ton extra. In this section it might be noted that the advance has been $1.50 the last month. In the Chicago district the following prices hold per net ton: Water pipe, 4-in., $29; 6-in. and larger, $27; Class A water pipe and gas pipe with an extra charge of $1.

Chain—Due to the advance in the cost of raw materials, the price has advanced 50c. per 100 lb. Business is very good and the following quotations hold firm and steady:

5/16 in.	$8.00	½ and 9/16 in.	$3.50
¼ in.	5.45	5/8 and 11/16 in.	3.40
7/32 in.	4.45	¾ and 13/16 in.	3.30
3/8 in.	3.90	7/8 and 15/16 in.	3.20
7/16 in.	3.70	1 to 1¼ in.	3.10

The above prices are per 100 lb. f.o.b. Pittsburgh.

EXTRAS TO ABOVE LIST PER 100 POUNDS

	For BB	For BBB
5/16-in. and ¼-in.	$1.50	$2.00
7/16-in. and larger	1.25	1.75

Triangle Mesh—The call for this material continues and the consequent advance in the price of other metal products caused the general revision in the quotations for this material. As we go to press the following quotations hold steady.

PRICE PER 100 SQ.FT. FOR FOUR-IN. MESH

Style No.	Cross-Sec. Area per Ft. Width	Plain Material: Carload Lots	Plain Material: Less Than Car Lots and Over 10,000 Sq.Ft.	Galvanized: Carload Lots	Galvanized: Less Than Car Lots and Over 10,000 Sq.Ft.
*4	0.102	$1.14	$1.25	$1.35	$1.46
5	0.077	.90	.99	1.07	1.16
6	0.058	.72	.78	.85	.92
*7	0.041	.56	.61	.66	.71
*23	0.170	1.91	2.09	2.27	2.45
24	0.142	1.64	1.80	1.95	2.11
25	0.124	1.46	1.60	1.73	1.87
*26	0.110	1.33	1.45	1.58	1.70
*27	0.085	1.09	1.19	1.29	1.39
28	0.66	.90	.99	1.07	1.16
29	0.049	.74	.81	.88	.95
31	0.261	2.81	3.07	3.34	3.60
32	0.225	2.44	2.67	2.90	3.13
33	0.196	2.17	2.38	2.58	2.79
34	0.140	1.67	1.83	1.98	2.14
35	0.109	1.33	1.45	1.58	1.70
36	0.075	.98	1.07	1.17	1.26
38	0.380	4.00	4.38	4.76	5.13
*39	0.325	3.45	3.77	4.10	4.42
40	0.283	3.02	3.31	3.59	3.88
41	0.208	2.31	2.52	2.74	2.96
42	0.151	1.75	1.91	2.08	2.24
43	0.101	1.25	1.36	1.48	1.60

*This material is made in regular widths of 18, 22, 26, 30, 32, 42, 46, 50, 54 and 58 in. Standard lengths of rolls are 150, 300 and 600 ft. Cutting to special length is charged extra.

Bars—Concrete Reinforcing—Mills are so busy turning out bars that they are not promising delivery on any new business for at least six or eight months. Over last month the price has advanced 20c., and it is safe to predict from the extraordinary amount of business on hand that a further advance is more than likely to take place. In this respect it is clearly shown that increases in the price does not at all curtail the demand. As we go to press, the following prices are effective:

	Cents per Pound: Mill Shipment Pittsburgh	F.o.b. Warehouse Pittsburgh	Delivered From Warehouse New York
¾ in. base	$1.70	$2.35	$2.35

Wire Rope—The same steady volume of business continues, and prices over the preceding month remain unchanged. On galvanized the discounts are 40 and 2½% off list. On bright they are 55 and 2½%. Special brand brights are selling at 50 and 2½% off list. At these discounts, the net price of wire rope at the mills is as follows:

Diameter in Inches	Price per Foot: Cast Steel	Crucible Steel	Plow Steel
2½	$0.77	$0.92	$1.10
2¼	0.63	0.75	0.88
2	0.51	0.59	0.70
1¾	0.40	0.48	0.57
1½	0.29	0.35	0.41
1¼	0.20	0.25	0.29
1	0.14	0.16	0.19
3/4	0.08	0.09	0.11
5/8	0.07	0.07	0.08

Expanded Metal Lath—Business continues very good, the dealers complain that they have more orders than they can fill, on account of the lack of stock. Prices remain the same as last month, but expected increase is due around the first of the year.

Prices for painted are as follows:

Gage	Weight	Carload	1,000 to 5,000	Under 1,000
27	233	$11.44	$12.52	$13.52
26	250	12.47	13.55	14.55
25	300	13.57	14.66	15.66
24	340	14.64	15.75	16.75
22	450	17.54	18.75	19.75

For galvanized cut in sheets, add 6c.

Freight Rates—The freight rate on finished steel products in the Pittsburgh district, including plates, structural shapes, merchant steel, bars, pipe fittings, plain and galvanized wire nails, rivets, spikes, bolts, black sheets (except planished), chain, etc., are as follows in cents per 100 lb.: Boston, 18.9; Buffalo, 11.6; Baltimore, 15.4; Cleveland, 10.5; Cincinnati, 15.8; Chicago, 18.9; Denver, 68.6; New Orleans, 30; New York, 16.9; Philadelphia, 15.9; St. Louis, 23.6; Minnesota and St. Paul, 32.9. Pacific Coast (all rail), 73.9.

Steel Sheet Piling—The price remains unchanged at $1.50 to $1.55 per 100 lb. for base sizes f.o.b. Pittsburgh.

Plates—Demand for plates has been exceptionally good and railroads have placed many orders for cars and locomotives, also shipbuilders have received contracts for vessels which has stimulated business to a great extent. However, a very recent report states that the Pennsylvania R.R. has recently withdrawn its inquiry for 11,000 cars because of the high prices quoted by the builders, who are having difficulty in getting deliveries on car wheels. Plate mills are well filled with orders for the first quarter, and deliveries are now being promised more or less at the convenience of the mills. Plates are nominally quoted at $1.75 per 100 lb., but for early delivery, $1.90 to $2. In Chicago, $1.89 to $1.99 is demanded; in New York, $1.87 to $1.97.

Old Material—The market for old material is exceptionally strong; prices have jumped since the last month and are well maintained. Very heavy sales are being reported and orders are pending calling for large quantities. In New York the improved conditions are very perceptible, and the following prices are being paid to dealers and producers per gross ton in this section:

Heavy melting steel scrap	$12.75 to 13.75
No. 1 railroad wrought	15.00 to 15.25
Stove plate	9.75 to 10.00
No. 1 machinery cast	12.75 to 13.00
Wrought turnings	7.75 to 8.00
Cast borings	77.5 to 8.00
Railroad malleable cast	10.00 to 10.50
No. 2 heavy cast	11.75 to 12.00

In Chicago the offering includes a number of large tonnages, cast scraps and rails, also a considerable amount of car wheels. The consumers show heavy demand for scrap materials and prices have advanced and are well maintained. For delivery at the buyer's works, Chicago and vicinity, including freight transfer charges, the following quotations hold:

Heavy melting steel scrap	$15.00 to 15.50
Old steel rails rerolling	15.25 to 15.50
No. 1 railroad wrought	14.00 to 14.50
No. 2 railroad wrought	13.00 to 13.50
No. 1 cast scrap	13.00 to 13.50
Pipes and flues	10.75 to 11.25
Agricultural malleable	10.50 to 11.00
Railroad malleable	13.00 to 13.25
Cast borings	6.75 to 7.00

Merchant Steel—Warehouse business has been so very good the last month that stocks are pretty well depleted, dealers having some difficulty in placing orders at the mills. As a result, prices have advanced every week in the past month, and the present quotations given below are very firm, and indications forcast further increase. Quotations as given below are the general base prices for small lots in jobber's store:

	Cents Per Pound
Refined iron:	
1 to 1⅞ in., round and square	2.35
1½ to 4 in. x ⅜ to 1 in.	2.35
1½ to 4 in. x ¼ to 5/16 in.	2.55
Burden's bar iron	3.05
Norway bars	4.50
Soft steel:	
¾ to 3 in., round and square	2.35
1 to 6 in. x ⅜ to 1 in.	2.35
1 to 6 in. x ¼ and 5/16 in.	2.40
Rods—⅝ and 11/16	2.45
Bands—1½ to 6 x to No. 8	2.65
Beams and channels—3 to 15 in.	2.40
Angles:	
3 in. x ¼ in. and larger	2.40
3 in. x 3/16 in. and ⅛ in.	2.85
1½ to 2½ in. x ⅛ in.	2.60
1½ to 2¾ in. 3/16 in. and thicker	2.50
1 to 1¼ in. x 3/16 in.	2.60
1 to 1¼ x ⅛ in.	2.65
Tees:	
1½ to 2½ x ¼ in.	2.55
1½ to 2½ x 3/16 in.	2.65
3 in. and larger	2.45

METALS

Copper—A very large business has been done in electrolytic copper in the past month, with a steady increase in price noted. The price of electrolytic the first of November was 18¼c. against the price of 20c. at the present time. Lake copper was selling at that time for 18¼c. and i snow selling for 20c. Business has been very good up until last week, when the 20c. price went into effect, since which time there has been a little lull. It is interesting to note that a year ago at this time copper was selling at $11.75.

Tin—Tin opened up the first week of November at 36c., with a drop the following week of 2¼c. After that continued buying forced the prices up. Until about the 25th of the month tin was selling at 43c. Since that time numerous reports have beared the market to some extent, and the price is now 40c. per lb.

Lead—The market on lead has been quieter than other metals, with less advance. There has been an advance over last month from 4.9c. to 5¼c., due to large export buying. Domestic trade is moderate, and dealers think that if the continued price holds there is enough incentive for smelters to stock well ahead.

Spelter—There has been a large demand during the past month for spelter, prices showing more of an increase than any of the other metals listed. A month ago this was selling for 14c. and 20c. is now being asked for futures with prompt shipment at 19c., with a very brisk market. At the price at which this is held, it is unprofitable for anybody to buy unless absolutely necessary, and this should curtail the demand enough so that a drop in price ought to be noticed shortly.

OLD METALS—The market is strong. The following are the dealers' purchasing prices in New York:

Copper	Cents per Lb.	Brass	Cents per Lb.
Heavy and crucible	16.50	Heavy	11.50
Heavy and wire	16.00	Light	9.50
Light and bottoms	14.00	No. 1 yellow rod turnings	12.00
Lead		No. 1 red turnings	11.00
Heavy	4.50	Zinc	12.00
Tea	4.25		

MISCELLANEOUS

Asphaltum—The demand still continues very heavy and will continue so until the paving season is finally closed. If the season in the north had not practically closed at the present time, prices would have been advanced on account of the scarcity of Mexican petroleum compared to the phenomenal demand. Business has been better than ever before in this line, and dealers figure that next year will be the largest year in the history of the business. Prices remain $15 per net ton in wooden packages in New York and about $19 in Chicago.

Labor—The market for unskilled labor is in about the same position as it was a month ago, being almost impossible to get men to go away from the cities without extra inducements being offered. Unemployment has dwindled to insignificant proportions, and numerous cities report a paucity of help, which is likely to become more marked as the season advances. A development that is all the more remarkable because at this season outdoor work usually slackens. The price for laborers is $2 a day for an 8-hr. day around New York.

Railway Ties—It is clearly evident that conditions have now reached a turning point. Inquiries now in the market for ties have been received from a great many of the principal roads in the country, and in most cases call for a very good supply for 1916 requirements. The Italian Government very recently appeared in the market for several million feet of yellow pine lumber, and as a result this caused some concern to tie manufacturers. In some cases it is believed that some of the railroads entered the market because of this. The freight situation shows no improvement, and partly as a result prices have advanced. Should business develop at the same rate as it did during the latter part of this month, a revision in the price is more than likely to take place. At present, however, the following prices hold:

First-class standard ties 7x9 in. by 8 ft. 6 in., 77c.; 6x8 in. by 8 ft. 67c. These prices are f.o.b. New York.

Sewer Pipes—Dealers report prices somewhat better in this line than a month ago, and a slight increase in price is noted with a prospect of a future advance. Discounts are as follows:

3 to 24"-80% off list; 27 to 30"-70% off list; on 30 to 36"-65% off list. At this rate prices are as follows:

PRICE OF SEWER PIPE PER FOOT

Size	Price	Size	Price
3-in.	$0.05	18-in.	$0.38
4-in.	.05	20-in	.45
5-in.	.08	22-in.	.60
6-in.	.08	24-in.	.65
8-in.	.11	27-in	1.35
10-in.	.16	30-in.	1.65
12-in.	.20	33-in.	2.187
15-in.	.27	36-in.	2.45

Flue Lining—Business is increasing and dealers are expecting another increase in price over the one noted in this issue. The present discount being 81% off of list. At this rate prices are as follows:

FLUE LINING—PRICE PER FOOT

Size in In.	Weight in Lb.	Price per Ft.	Size in In.	Weight in Lb.	Price per Ft.
4½x 8½	14	$0.066	8½x13	28	$0.123
4½x13	20	.085	8½x18	45	.17
4½x18	40	.19	13 x13	38	.16
7 x 7	15	.076	13 x18	57	.228
8½x 8½	18	.085	18 x18	75	.38

Glass—Market conditions have improved greatly in the past month, and at the present time large manufacturers claim that business is almost normal. The tendency seems to be to higher prices, and it is expected within a very short time there will be an increase. Prices as follows: Window: Single strength, 1-3 brackets inclusive, B quality, 90% and 30%; single strength, 1-3 brackets inclusive, A quality, 90% and 20%; single strength, above 3d bracket, B quality, 90% and 10%; single strength above 3d bracket, A quality, 90%; double strength, all brackets, B quality, 90% and 20%; double strength, all brackets, A quality, 90% and 10%; single and double strength, AA quality, special prices. Plate, 90% and 40%. Skylight, ¼-in. wire rough or ribbed, 14c. per sq.ft. Boxing on above extra for out-of-town shipment.

Clay Drain Tile—Local dealers in this line are very much pleased at the amount of business they are doing and look to a big increase over present business in the early spring. Prices are as follows:

PER 1,000 SQ.FT.

2 in.	3 in.	4 in.	5 in.	6 in.	8 in.
$17.50	$22.50	$32.50	$47.50	$57.50	$97.50

These prices are in carload lots, f.o.b. New York.

RAILWAYS—STEAM AND ELECTRIC

Proposed Work

Maine—Bar Harbor & Union River Power Co. plans to build electric line from Bluehill Falls to Brookline and Sedgwick, 14 miles. C. M. Tolman, Bangor, Maine, Ch. Engr.

Maine—Mattawamkeag & Northern Ry. received charter to build line from Mattawamkeag northwest via East Millipocket to Millinocket, 23 miles. Charles W. Mullen and I. B. Wood, Bangor, interested. Noted Nov. 18.

Massachusetts—Bay State Street Railway Co. received franchise from Council to double track line on new river boulevard from Lowell St. to Lawrence Line. R. S. Goff, Boston, Mass., Vice-Pres. and Gen. Mgr.

Massachusetts—Holyoke Street Railway Co. contemplates extending line in South Hadely Falls on West Main St. to Canal St., Canal to Taylor St., Taylor to West Main St. Louis D. Pellissier, Holyoke, Gen. Mgr. and Pur. Agt.

Connecticut—New York, New Haven & Hartford R.R. will expend $17,000,000 for improving its line as follows: Additional electrification to get full benefit of that already done, $1,500,000; trackage, yards and sidings, $3,000,000; improved signals, $1,000,000; rolling stock, $9,000,000.

Pennsylvania—Baltimore & Ohio R.R. Co. contemplates constructing third track from Green Junction to Indian Creek, seven miles. F. L. Stuart, Baltimore, Md., Ch. Engr.

Pennsylvania—Highland Grove Traction Co. contemplates extending line from McKeesport to East Pittsburgh. John M. Lyle, McKeesport, Gen. Mgr. and Pur. Agt.

Maryland—Press reports state that Western Maryland R.R. contemplates double-tracking branch line from Cumberland to Hagerstown in spring. H. R. Pratt, Baltimore, Ch. Engr.

Virginia—Surveys completed and right-of-way secured by Norfolk, Washington & New York R.R. for line from Newport News, Va., to Washington, D. C., 159 miles, with branch line down Northern Neck, 50 miles. Channing W. Ward, Richmond, Va., Pres.

West Virginia—Baltimore & Ohio R.R. Co. will double-track its line from Fairmont to Wheeling, 77 miles. Estimated cost between $3,500,000 and $4,000,000. F. L. Stuart, Baltimore, Md., Ch. Engr.

West Virginia—Pond Fork Railway will award contract about Jan. 10 for 15-mile railway from Madison. According to press reports Cole & Crane will build several miles of logging road as an extension of Pond Fork Railway. F. I. Cabell, Richmond, Va., Ch. Engr. Noted Sept. 23.

North Carolina—Surveys being made for extension of line of Watauga & Yadkin River R.R. from Darby, N. C., to Rogers Mills, eight miles. H. C. Landon, North Wilkesboro, Gen. Mgr. Noted Sept. 16.

Florida—Pensacola, Mobile & New Orleans R.R. sold bonds to complete its line from Pensacola to Mobile, Ala., about 17 miles. Henry McLaughlin, Pensacola, Fla., Pres.

Tennessee—New Orleans, Mobile & Chicago R.R. contemplates extending line from Middleton to Jackson, Tenn. B. V. Wright, Laurel, Miss., Ch. Engr.

Tennessee—Tennessee Power Co., Chattanooga, plans to electrify six miles of its railroad from Parksville which connects with Louisville & Nashville R.R., near Shelton. F. W. Hoover, Chattanooga, Tenn., Gen. Mgr.

Indiana—Plans being considered for building electric railway from Washington and Linto via Bicknell, Frelandville, Pleasantville and Dugger. A. L. Brocksmith, Bicknell, interested.

Illinois—Blue Island Commercial Club, Riverdale Improvement Association, Dolton Civic Club, West Hammond City Club and the Hammond Chamber of Commerce, Chicago, interested in construction of railway from Calumet Park to State Line St., West Hammond.

Illinois—J. W. Kendrick in a report to Directors of Chicago, Rock Island & Pacific Railway recommended expenditure of $27,000,00 during next three years for rehabilitation of line. C. A. Morse, Chicago, Ill., Ch. Engr.

Illinois—Illinois Central R.R. will build double track line from Grayville to Metropolis, about 100 miles. A. S. Balwin, Chicago, Ill., Ch. Engr.

Iowa—Citizens of Sioux City plan to build interurban railway from Sioux City, Iowa, to Mitchell, S. D. Estimated cost, $1,500,000.

Iowa—Ft. Madison Street Railway Co. will rehabilitate its lines. Estimated cost, $50,000. D. A. Morrison, Ft. Madison, Pres., Gen. Mgr. and Pur. Agt.

Minnesota—Preliminary surveys being made for spur track from Steelton to Morgan Park for Spirit Lake Transfer Ry. Co., New Duluth, Minn.

Kansas—It is reported that Arkansas Valley Interurban Ry. Co. is considering plans to extend line from Wichita to Eldorado. Charles D. Bell, Wichita, Kan., Secy., Supt., Pur. Agt. and Ch. Engr.

Kansas—Wichita R.R. and Light Co., Wichita, plans to build line on East 13th St. D. I. Hayworth, Wichita, Ch. Engr.

South Dakota—Duluth, Huron & Southern Ry. plans to build line from Huron, S. D., to Duluth, Minn. G. W. Morrow, Sisseton, S. D., Vice-Pres.

South Dakota—South Dakota Packing and Shipping Co. will build spur track from Great Northern R.R. into yards of plant at Watertown.

North Dakota—Minneapolis, St. Paul & Sault Ste. Marie Ry. plans to build line from Max to Minot. C. N. Kalk, Minneapolis, Minn., Ch. Engr.

Montana—Great Northern Ry. Co. contemplates building a line from Scobey to Glentana, 50 miles, during 1916. A. H. Hogeland, St. Paul, Minn., Ch. Engr.

Missouri—Benjamin F. Bush, receiver for Iron Mountain R.R. and Missouri Pacific Ry., authorized to expend for new steel rails $175,000 for Iron Mountain R.R. and $536,000 for Missouri Pacific Ry. and $273,000 to improve road and equipment of both systems. E. A. Hadley, St. Louis, Ch. Engr., Missouri Pacific Ry.

Arkansas—Pine Bluff & Northern Ry. plans to build extension to line from Cullor, Ark., to Pine Bluff, 35 miles. E. C. Buchanan, Little Rock, Ark., Ch. Engr.

Texas—A. T. Perkins, 401 Locust St., St. Louis, Mo., Pres. Marshall & East Texas Railway interested in construction of railroad from Paris to New Orleans.

Texas—Street railways of Dallas contemplate building loop around block surrounded by Jefferson, Jackson, Houston and Young St. to provide service to union terminal stations. Edward T. Moore, Dallas, Mgr. of Dallas Consolidated Electric Street Railway Co., Rapid Transit Railway Co. and Metropolitan Electric Street Railway Co.

Texas—Proposition being considered for building gas-electric interurban railway from Buena Vista to connect with Orient R.R. and run northwest up Pecos Valley, 35 miles. Pecos Valley R.R. Association interested. V. L. Sullivan, Chn.

Texas—Press reports state that Southern Traction Co. plans to extend line from Waco south to Austin, about 100 miles, thence to San Antonio, 82 miles. R. B. Stuchter, Dallas, Tex., Gen. Mgr. and Luther Dean, Dallas, Ch. Engr.

Colorado—It is reported that the business men of Tulsa, Okla., plan to build railway from Colorado Springs east to Ordway and Garden City, Kan., and from Garden City, Kan., to Tulsa, Okla.

Idaho—Sandpoint & Interurban Railway Co., Ltd., will improve its line and build spur track to Great Northern Railway Depot. A. Filson, Sandpoint, Idaho, Pres., Gen. Mgr. and Pur. Agt.

Washington—Bellingham & Northern R.R. plans to extend line from Goshen, Wash., to Welcome, 11 miles. E. O. Reeder, Seattle, Wash., Ch. Engr.

Washington—Merrill & Ring Lumber Co., Everett, contemplates building logging railway from mouth of Pysht River in Clallam County. Estimated cost, $250,000.

Oregon—Southern Pacific Co. plans to electrify line from Whiteson to Corvallis, 43 miles. W. Hood, San Francisco, Calif., Ch. Engr.

New Brunswick—Department of Railways and Canals, Ottawa, will complete portion of St. John & Quebec Ry. (Canadian Government Railways), from Georgetown to Centerville. C. B. Brown, Moncton, N. B., Ch. Engr.

Quebec—Quebec Central Ry. contemplates extending line from English Lake, Que., to point in township of Dionne, L'Islet County, about 25 miles. J. H. Walsh, Aherbrooke, Que., Gen. Mgr.

Ontario—Plans being considered for hydro-radial railway from Petrolia to Chatham.

Ontario—Grand Trunk Ry. authorized to build sidings and spurs across number of highways in village to premises of Port Credit Land Co., Ltd. H. R. Safford, Montreal, Que., Ch. Engr.

Ontario—Plans being prepared for extension of line of London & Lake Erie Railway and Transportation Co. from Lambeth to Delaware. W. N. Warburton, London, Gen. Mgr. and Pur. Agt.

Alberta—Grand Trunk Ry. authorized to build railway spur for Great West Coal Co., Ltd., in northeast quarter of Section 6 and southeast quarter of Section 7-53-23, North Alberta. H. R. Safford, Montreal, Que., Ch. Engr.

Bids In and Contracts Awarded

Ohio—Contract for double-tracking line of Cincinnati, Hamilton & Dayton Ry. from Dayton to Cincinnati awarded to FERGUSON & EDMONSON, Pittsburgh, Penn. F. L. Stuart, Baltimore, Md., Consult. Engr.

Utah—Salt Lake & Utah R.R. awarded contract to WASATCH CONSTRUCTION CO. for grading of extension from Spanish Fork to Payson. Noted Nov. 11.

LIGHT, HEAT AND POWER

Proposed Work

Mass., Framingham—Edison Electric-Lighting Co., Boston, has applied for permission to place its wires underground in the business section. Estimated cost, $40,000.

Conn., Hartford—Connecticut Power Co., New London, has applied for a permit to enlarge its power house on Commerce St. Estimated cost, $197,000.

N. Y., New York—(Borough of Manhattan)—(Official)—Bids will be received by R. A. C. Smith, Comr. of Docks, Pier "A," Battery Pl., North River, until 10 a.m., Dec. 6, for furnishing and delivering boiler tubes.

N. Y., Tonawanda—General Electric Co., Buffalo, will build power plant at Tonawanda. Estimated cost, $2,000,000. C. R. Huntley, Pres.

Penn., Brackenridge—Municipal electric-lighting system will be installed in Brackenridge. S. B. Martin, Pittsburgh, Consult. Engr.

Md., Frederick—City Council considering plans for enlarging municipal electric-light plant. Estimated cost, $103,000. C. L. Reeder, Baltimore, Consult. Engr.

W. Va., Thurmond—Mt. Hope Electric Power and Water Co., Mt. Hope, has applied for permission to install and operate electric-light, water and sewer systems in Thurmond.

N. C., Statesville—An electric transformer station will be built at Statesville by Southern Power Co. of Charlotte.

Miss., Boonville—See item under "Water Works."

Miss., Clarksdale—Bids will be received by City Commissioners until Dec. 14 for furnishing equipment for improving power plant.

La., Church Point—Citizens plan to hold election to vote on bonds for electric-light plant and water system.

Ky., Mater—Electric-light system will be installed in Mater by Wiley W. Gibson.

Ohio, Cleveland—City Council authorized an expenditure of $75,000 for extending cable of municipal electric-light plant.

Ohio, Massillon—Massillon Electric and Gas Co. plans to improve its plant on Erie St. Estimated cost, $100,000.

Ohio, Salem—Municipal Service Co., Philadelphia, Penn., plans to take over the plant of the Salem Electric-Light and Power Co. and the Columbiana County Electric-Light and Power Co., Salem. Company contemplates an expenditure of $100,000 for improvements. H. T. Hartman, Philadelphia, Pres.

Ohio, West Salem—F. L. Berry has purchased electric-light franchise and system at $4,400.

Ind., Terre Haute—See item under "Buildings."

Ill., Galesburg—See item under "Water Works."

Wis., North Milwaukee—A. O. Smith Co., 27th St. and Keefe Ave., will soon award contract for boiler house. Estimated cost, $35,000.

Iowa, Clarinda—Clarinda Electric Light Co. will build power plant. Estimated cost, $80,000.

Iowa, Ft. Dodge—Citizens voted to issue $100,000 bonds for power dam in Des Moines River in connection with hydro-electric power plant for Ft. Dodge. Noted Oct. 14.

Iowa, Imogene—Plans for electric-light system in Imogene being considered.

Iowa, Low Moor—City plans to install electric-lighting system. Bonds for $4,500 authorized for this purpose.

Minn., Montrose—Plans being considered for electric-light system.

Minn., Rochester—(Official)—Bids will be received by Public Utility Board until 10 a.m., Dec. 6, for furnishing equipment for new power plant. Charles L. Pillsbury Co., Minneapolis, Minn., Engr.

Kan., Coffeyville—Election will soon be held to vote on $20,000 bonds for improving municipal electric-light plant.

Neb., Dixon—Election will soon be held to vote to issue bonds for electric-lighting system.

S. D., Chancellor—Press reports state that municipal electric-light plant will be installed in Chancellor.

S. D., Mitchell—Mitchell Street & Suburban Ry. investigating water power at Great Bend, 78 miles north of Mitchell, with view of installing power plant to supply electricity to proposed railway and surrounding towns.

Wyo., Cheyenne—An expenditure of $50,000 planned by Western Power Co., owner of Cheyenne Light, Fuel and Power Co., for improvements.

Mo., Springfield—Election will be held Jan. 11 to vote on $400,000 bonds for electric-light plant.

Okla., Heavener—Bonds for $20,000 voted by citizens for electric-light plant.

Okla., Shamrock—Plans being considered by Sapulpa & Oil Fields R.R. Co. to install electric-power plant to furnish electricity for operating machinery in oil fields and for railroad use.

Colo., Frederick—Citizens contemplate municipal electric-light plant.

N. M., Santa Fe—Plans of Rio Grande Light, Heat and Power Co. for raising dam in White Rock Canyon to furnish current to Albuquerque, Santa Fe, Las Vegas and other points approved by James A. French, State Engr. Estimated cost, $650,000.

Idaho, Arco—Public Utilities Commission granted franchise to Richard W. Ferris to build and operate electric-light and power plant and water system in Arco. Noted Nov. 25.

Ariz., Miami—Election will be held Dec. 14 to vote on $12,500 bonds for municipal gas plant.

Ariz., Miami—Election will be held Dec. 14 to vote on $40,000 bonds for municipal electric-light plant.

Wash., Woodland—North Coast Power Co. plans to build power line from Woodland to Vancouver.

Ore., Albany—Franchise has been granted William Hoeflich to install and operate electric-light plant in Albany.

Calif., Newport—Board of Trustees considering installation of gas distributing system. Estimated cost, $30,000.

Ont., Forest—Town Council contemplates installing hydro-electric lighting and power system. R. Karr, Clk.

Bids In and Contracts Awarded

R. I., Providence—(Official)—Contract for heating system in new school at Cole and Luzon Ave. awarded to WILLIAM E. DOHERTY, Providence, at $14,025.

N. Y., Buffalo—Fitzpatrick & Hoepfner at $67,500, submitted lowest bid for heating and power work, and Bison Electric Co., at $22,900, for electrical work at Buffalo State Hospital. Noted Sept. 16 and Oct. 28.

N. Y., Utica—Contract for installing ventilating system in Utica Free Academy awarded to MONARCH VENTILATOR CO., New York, N. Y., at $41,000.

S. C., Hartsville—Contract for installing heating plant in Coker College awarded to W. B. GUIMARIN & CO., Columbia, at $17,500.

Ala., Tuscaloosa—Contract for completing gas mains for Tuscaloosa Belt Railway and Utilities Co. awarded to MUNICIPAL ENGINEERING AND CONSTRUCTION CO., Atlanta, Ga. Estimated cost, $12,000.

La., New Orleans—Bids were received by Dock Board for underground conduits, wiring, etc., at municipal dock as follows: Marks Electric Construction Co., $21,690, Barnes Electric Construction Co., $21,700, W. A. Dilzell, $26,900. Ford, Bacon & Davis, Engr.

Wis., Bloomington—GLOBE ELECTRIC CO., Milwaukee, awarded contract for electric-light plant in Bloomington.

BRIDGES

Proposed Work

Mass., Salem—Plans being considered by County Commissioners for rebuilding Essex bridge across Danvers River between Salem and Beverly.

N. Y., Lancaster—(Official)—Bids will be received by F. H. Maute, Town Clk., until 3 p.m., Dec. 15, for two bridges in Transit Rd. between Lancaster and Cheektowga.

N. Y., Silver Creek—Two concrete bridges will be built in Silver Creek. Estimated cost, $14,500.

N. J., Highlands—Plans being prepared for bridge across Shrewsbury River at Highlands. Estimated cost, $35,000.

N. J., Newark—State Board of Commerce and Navigation is negotiating with Central R.R. of New Jersey for construction of new bridge over Newark Bay between Elizabeth and Bayonne.

N. J., New Gretna—Bridge will be constructed across Mullica River by Atlantic and Burlington Counties. Estimated cost, $80,000.

Penn., Bowmanstown—Lehigh Valley R.R. will build bridge across Lehigh River at Bowmanstown.

Penn., Erie—(Official)—Bids will be received by State Highway Department, Harrisburg, until 10 a.m., Dec. 15, for bridge near Kearsarge, Erie County.

Penn., Harrisburg—(Official)—Bids will be received by State Highway Department until 10 a.m., Dec. 7, for bridge across Four Mile Creek, Harborcreek Township, Erie County.

Penn., Philadelphia—City will build three reinforced-concrete bridges. G. S. Webster, Engr., Dept. of Public Wks.

Penn., Phoenixville—Bids will be received by County Commissioners, Norristown, until Dec. 11, for reinforced-concrete bridge over Schuylkill River. B. H. Davis, Consult. Engr., Whitehall Bldg., New York, N. Y.

Penn., Sunbury—(Official)—Bids will be received by Samuel B. Rambo, Supt. of Pub. Grounds and Bldgs., Harrisburg, until 2 p.m., Dec. 14, for 175-ft. steel truss bridge at Sunbury. G. A. Flink, Harrisburg, Engr.

Ga., Roswell—Commissioners of Cobb County, Marietta, will build steel bridge across Chattahoochee River at Roswell. Estimated cost, $6,000. Noted Oct. 28.

Fla., Ft. Lauderdale—See item under "Streets and Roads."

Ala., Birmingham—Plans being prepared for bridge over Cahaba River on Birmingham and Leeds Highway.

Ala., New Decatur—W. B. Edmundson is interested in a project to build a toll bridge at an estimated cost of $200,000.

Miss., Fayette—Bids will be received by J. C. Shelton, Clk., County Bd. of Superv., until Dec. 6, for steel bridge across Davenport Bayou.

Miss., Grenada—Bids will be received until Dec. 6 by County Supervisors for steel bridge near Leflore.

Miss., Woodville—Bids will be received until Dec. 6 by County Supervisors for three bridges over Buffalo Bayou.

Ohio, Akron—Plans being prepared for bridge across railroad tracks at Forge St. Estimated cost, $100,000, $75 000 of which will be paid by railroad company and $25,000 by city.

Ohio, Cleveland—Bids will be received by E. B. Krause, Clk. Bd. of Comrs. of Cuyahoga County, until 10 a.m., Dec. 8, for bridge work as per Report No. 3654.

Ohio, Dayton—Bonds for $115,000 voted by citizens for Mad River and Keewee St. bridge.

Ohio, St. Clairsville—(Official)—Bids will be received by B. W. Hopkins, Audr. of Belmont County, until 1 p.m., Dec. 13, for three bridges and one culvert on line of Jenewine Rd. in Wayne and Washington Townships, Belmont County.

Ohio, Warren—Bids will be received by Board of Commissioners of Trumbull County until Dec. 6 for superstructure of South Main St. bridge.

Ind., Evansville—Plans being prepared by Herman Laub, Engr., Pittsburgh, Penn., for bridge across Ohio River about six miles above Evansville. Estimated cost, $550,000.

Ind., Wabash—Bids will be received until Dec. 7 by Board of County Commissioners for Huntington St. bridge.

Mich., Ada—Bids will be received until Dec. 8 by Kent County Road Commissioners for steel bridge across the Grand River at Ada. Estimated cost, $30,000.

Mich., Lansing—Bids will be received by Frank F. Rogers, State Highway Comr., until noon, Dec. 9, for bridge No. 37 and 50.

Ill., Bellflower—(Official)—Bids will be received by R. O. Edwards, County Supt. of Highways, Court House, Bloomington, until 2 p.m., Dec. 18, for steel bridge in Lexington Township.

Ill., Watseka—(Official)—Bids will be received by B. Jordan, County Supt. of Highways, until 11 a.m., Dec. 15, for reinforced-concrete or steel bridge in Douglas Township, Iroquois County.

Ill., Watseka—(Official)—Bids will be received until 11 a.m., Dec. 15, at office of County Superintendent of Highways, for reconstruction of bridge No. 137 between Belmont and Milford Townships, Iroquois County.

Wis., Chippewa Falls—Press reports state that bridge will be built across Chippewa River above Paint Creek dam. Estimated cost, $55,000.

Wis., Prairie du Sac—Plans being prepared by M. W. Torkelson, Bridge Engr., State Highway Comn., Madison, for bridge across Wisconsin River at Prairie du Sac. Estimated cost, $75,000. Noted Nov. 11

Iowa, Epworth—Construction of viaduct being considered by Illinois Central R.R. A. S. Baldwin, Chicago, Ill., Ch. Engr.

Iowa, Iowa City—Iowa City Commercial Club is promoting the construction of a viaduct across the tracks of Rock Island Southern Ry. at College Ave. Estimated cost, $35,000.

Minn., Anoka—See item under "Streets and Roads."

Kan., Ft. Scott—City plans to build concrete bridge across Mormaton River on North National Ave. Estimated cost, $10,000.

Kan., Topeka—City plans to construct reinforced-concrete bridge over Shunganunga Creek on Sixth Ave. Estimated cost, $12,600.

Mont., Hamilton—Bids will be received by F. E. Robbins, Clk., Bd. of County Comrs., until Dec. 6, for destroying and removing old bridge across Bitter Root River east of Florence and building two new bridges across East Fork of Bitter Root River.

Mo., Warsaw—Bids will be received until 1:30 p.m., Dec. 14, by B. R. Burton, Clk. of Benton County, for bridge over Pomme de Terre River, Township 39.

Tex., Clarksville—See item under "Streets and Roads."

Okla., Purcell—An election will soon be held to vote on $100,000 bonds for bridge work in McClain County.

Okla., Vinita—(Official)—Citizens defeated $50,000 bonds for 17 bridges. Noted Nov. 4.

Wash., Pasco—Plans being prepared by C. E. Fowler, Consult. Engr., Central Bldg., for steel bridge across Snake River between Pasco and Burbank. Estimated cost, $50,000.

Bids In and Contracts Awarded

Maine, Kingsfield—SAUNDERS ENGINEERING CO., Portland, at $15,000, awarded contract for reinforced-concrete bridge over Carrabassett River.

Mass., Boston—Bids were received Nov. 22 for concrete bridge over Charles River at North Beacon St. as follows: A. G. Tomasello, 69 Gibson St., Dorchester, $117,352; Fred T. Leyl Co., Springfield, $119,560; Coleman Bros., Chelsea, $124,011. Noted Nov. 11.

R. I., Woonsocket—(Official)—Bids were received Nov. 23 for Hamlet Ave. and Fairmount St. bridge as follows: Hamlet Ave. bridge, E. W. Foley Contracting Co., New York, N. Y., $71,886; Brien & Bouvier, Boston, Mass., $73,152; Bruno & Petitte, Boston, Mass., $90,090; Fairmount St. bridge, Spaulding Construction Co., Suffield, Conn., $21,812; E. W. Foley Contracting Co. ,New York, N. Y., $23,795; E. B. Roberts Construction Co., Pittsfield, Mass., $24,742. Noted Nov. 4.

Conn., Hartford—Contract for reinforced concrete bridges and widening of causeway in Haddam Township awarded to DONAHUE BROS., Middletown, $6,217. Noted Nov. 25.

Conn., Hartford—Contract for concrete bridge on Hartford-Saybrook Turnpike, Chester Township, awarded to JOHN G. HOLBROOK, Westbrook, at $6,165. Noted Nov. 25.

N. J., New Brunswick—Contract for reinforced-concrete bridge over Tennents Brook on South Amboy-Bordentown Turnpike awarded to ERRICKSON & MORRELL, Moyton.

Penn., Allentown—Central of New Jersey awarded contract to PENNSYLVANIA STEEL CO., Steelton, Penn., for fabricating and erecting steel superstructure of new bridges over Lehigh River at Allentown. Estimated cost, $52,500.

Penn., Kennet Square—Contract for stone arch bridge over Red Clay Creek awarded to P. J. McCORMIC & SON, West Chester, at $5,598. Noted Nov. 11.

Penn., Philadelphia—Contract for reinforced-concrete bridge across Ludlow St. awarded to F. W. VAN LOON CO., Philadelphia, at $20,000.

Kan., Pittsburgh—Contract for bridge at West Prairie Ave. awarded to A. JAICKS CO.

Mo., Joplin—(Official)—Contract for viaduct over tracks of St. Louis & San Francisco R.R. on Kentucky Ave. awarded to HORTON CONCRETE CONSTRUCTION CO., 520 Reliance Bldg., Kansas City, at $18,890. Noted Oct. 28.

Okla., Bigheart—Contract for reconstructing bridge awarded to ROCHESTER BRIDGE CO., at $5,995.

Wash., Aberdeen—A. R. EICHLER, Seattle, at $4,355, awarded contract for approaches and false work for repairing bridge across Chehalis River. Noted Sept. 23 and Nov. 4.

Calif., Bakersfield—Robert Sherer Co., Pacific Electric Bldg., Los Angeles, at $13,465, submitted lowest bid for bridges and culverts on Division, 10, Section 7, Bakersfield-Mojave Rd. Noted Nov. 4.

Calif., Los Angeles—Edgar T. Wheeler, at $7,190, submitted lowest bid for bridge across San José Creek on Lemon Ave.

Calif., Sacramento—(Official)—Contract for reinforced-concrete bridge across Myers Creek, Imperial County, awarded to HOLLAND CONSTRUCTION CO., San Diego, at $15,600. Noted Oct. 21 and Nov. 18.

WATER WORKS

Proposed Work

N. Y., Buffalo—An appropriation of $57,599 made by Board of Alderman for improving water system.

N. Y., Red Creek—Surveys being made by H. C. Kittredge, Hydraulic Engr., Rochester, for water system. Estimated cost, $25,000.

Penn., Pittsburgh—Election will soon be held to vote on $7,000,000 bonds, $1,200,000 of which will be used for enlarging and improving water system. R. Swan, Dir. of Pub. Wks.

Md., Somerset—Plans being considered by Somerset Heights Water & Power Co. for improving and enlarging water system.

Va., Newport News—Newport News Light and Water Co. plans new 23-in. supply line from Reservoir toward Oyster Bay.

W. Va., Thurmond—See item under "Light, Heat and Power."

S. C., Charleston—Election will be held Dec. 14 to vote on $1,500,000 bonds for purchase of plant of Charleston Light and Water Co. and $100,000 bonds for improving and enlarging same.

Ala., Cullman—Water mains will be extended about two miles.

Miss., Boonville—Bids will be received by County Supervisors until Dec. 6 for constructing water and light plant.

Miss., Clarksdale—Bids will be received until Dec. 14 by M. W. Purnell, City Clk., for improving water system.

La., Church Point—See item under "Light Heat and Power."

Ky., Winchester—City plans to enlarge water system.

Ohio, Canal Winchester—Bids will be received by G. M. Herbst, Clk., until noon, Dec. 30, for purchase of $12,000 bonds for constructing water system.

Ohio, Wilberforce—Bids will be received by Board of Trustees until Dec. 14, for furnishing materials and improving water supply system.

Mich., Mt. Morris—Press reports state that city contemplates installation of water system. H. W. Graham, interested.

Mich., Quincy—(Official)—We have been informed that plans for water system are not being prepared as stated in our issue of Nov. 4.

Ill., Galesburg—Bonds for $80,000 sold for water system and electric-light plant. Noted Oct. 14 and Nov. 4.

Wis., Milwaukee—City Council has accepted report of committee for extending Linwood Ave. intake water tunnel 2,500 ft. Estimated cost, $500,000. F. G. Simmons, Comr. of Pub. Wks. Noted Aug. 19.

Iowa, Marshalltown—Plans being prepared for addition to municipal pumping station.

Kan., Emporia—Plans being prepared by Black & Veatch, Engr., Kansas City, Mo., for filtration plant, distributing system and other improvements to water system. Estimated cost, $125,000.

Kan., Lawrence—Election will be held March 7 to vote on $175,000 bonds for purchase and improvement of water system. Noted Nov. 4.

Mo., Cape Girardeau—Plans for building intake tower being considered by Missouri Public Utilities Co. of St. Louis. Estimated cost, $25,000.

Mo., Lees Summit—Contract for water system will be awarded about Dec. 15. Estimated cost, $45,000. Henrci, Kent & Lowry Engineering Co., Kansas City, Engr. Noted Sept. 30.

Ark., Beebe—Bids will be received about Jan. 1 for water system. Estimated cost, $15,000. Noted Oct. 7.

Ark., Gravette—Plans being considered by City Council for improving municipal water system and electric light.

Tex., Denton—Bids will soon be received for 4,000-ft. of water pipe and one mile of sewer pipe.

Tex., Houston—David Fitzgerald, City Water Comr., will drill artesian wells, install pumps and build pumping house for North side auxiliary water plant and connect water pipe from new plant to city mains through Glen Park and North Main St. Estimated cost, $35,000.

Tex., Mart—City will issue $18,000 bonds for water-works extensions. J. L. Vaughn, Mayor.

Tex., Trinity—H. S. Wilder, Consult. Engr., Houston, will prepare plans and submit report estimating cost of complete water system.

Okla., Clinton—Election will be held to vote on bonds for $6,000 for extension of water works system.

Okla., Tulsa—Election to vote on $600,000 bonds for storage basin at mouth of Shell Creek postponed from Nov. 23 to Jan. 2. Noted Nov. 4.

Idaho, Arco—See item under "Light, Heat and Power."

Idaho, New Plymouth—City Council has received petition from R. S. White, Pres. of New Plymouth Water Co. for permission to build and operate water system in New Plymouth.

Utah, Aurora—Installation of municipal water system under consideration.

Utah, Centerville—Election will soon be held to vote bonds for municipal water system.

Ariz., Flagstaff—Coconino Water Development and Stock Co., recently incorporated with $100,000 capital stock, plans to develop a supply of water on the slope on San Francisco Peak, near Flagstaff, and to distribute it by means of a pumping plant and pipe line to all stations on Atchison, Topeka & Santa Fe R.R. between Ashfork and Angel, also to tourist resorts on rim of Grand Canyon. C. H. Spencer, interested.

Ariz., Miami—Election will be held Dec. 14 to vote on $80,000 bonds for water system.

Calif., Azusa—City has retained F. E. Trask, Engr., Union Oil Bldg., Los Angeles, to prepare plans for municipal water system.

Calif., Richmond—(Official)—J. H. Dockweiler, Engr., retained by Richmond Water Commission to submit a report on a most suitable water system for city.

Calif., Whittier—Plans will be prepared by F. C. Roberts, Engr., Marsh-Strong Bldg., Los Angeles, for water and distributing system. Estimated cost, $100,000.

Que., Montreal—City plans to enlarge and improve water system. M. Cote, City Comptroller.

Que., St. Hyacinthe—Bids will be received until Jan. 11 by Hector Cadieux, City Engr., for mechanical gravity filter plant.

Ont., Cornwall—Plans being considered by Town Council for extending water mains and installing pump. Estimated cost, $25,000. J. E. Harkness, Clk.

Ont., Dryden—Town Council contemplates water system. R. S. McKenzie, 1002 Union Trust Bldg., Winnipeg, Man., Consult. Engr.

Ont., Galt—City plant to install two motors in electrical pumping plant at water-works. Estimated cost, $5,000.

Bids In and Contracts Awarded

Mass., Lynn—Contract "A" for Ipswich River pumping station awarded to BAY STATE DREDGING AND CONTRACTING CO., Boston, at $11,263; Contract "C" for De Laval pump to POWER EQUIPMENT CO., Boston, at $11,995. Noted Oct. 21 and 28.

N. Y., Syracuse—Contract for intake pipe at Onondaga Lake for Solvay Process Co. awarded to GREAT LAKES DREDGE AND DOCK CO., Buffalo, at $200,000.

N. J., South Orange—Contract for laying water mains in Audley St. and Montague Pl. awarded to DOMINICK MERCANDANTE.

La., White Castle—Contract for installing water system awarded to AMERICAN CAST IRON PIPE CO., Birmingham, Ala. Noted Sept. 2.

Ohio, Cincinnati—Contract for concrete water tanks in Kennedy Heights awarded to FERRO CONCRETE CONSTRUCTION CO., at $168,747. Noted Oct. 14.

Ohio, Cleveland—Contract for boiler foundations for filtration plant awarded to F. W. MARK CO., Leader News Bldg. Estimated cost, $4,500.

Ohio, Cleveland—Contract for two 60-in. water mains at Division Ave. Pumping Station awarded to HOAG & ZULLO CO.

Ill., West Frankfort—(Official)—Contract for municipal water system awarded to CHARLES S. LAIM, St. Louis, Mo., at $83,000. Noted Nov. 11.

Iowa, Boyden—Contracts for water system awarded as follows: ADNA DOBSON, Lincoln, Neb., at $5,563, for pipe line; DES MOINES BRIDGE AND IRON CO., Des Moines, at $2,650, for tower and tank; WARD & WEIGHTON, Sioux City, at $1,528, for pump house and drill well; FAIRBANKS, MORSE CO., Chicago, Ill., at $610, for pump and engine.

Minn., Duluth—Contract for 5,000-ft. 1¼-in. and 1,000-ft. 1¼-in. galvanized iron pipe awarded to DULUTH PLUMBING SUPPLIES CO.

Tex., Beaumont—Contract awarded to SPENCE & HOWE CONSTRUCTION CO. for water mains across Neches River. Estimated cost, $10,800.

Tex., Ft. Worth—Contract awarded to HEDGES CONSTRUCTION CO., Springfield, Mo., for completing West Fork Reservoir and constructing sewage-disposal plant. Estimated cost, $172,000. Noted Oct. 14.

Ont., Berlin—City Council awarded contracts for water system as follows: CANADIAN-ALLIS-CHAMBERS CO., LTD., King St., W. Toronto, at $4,492, for pumping machinery; GARTSHORE-THOMPSON PIPE AND FOUNDRY CO., Stuart St., W., Hamilton, at $7,074, for piping; KERR ENGINE CO., Walker Rd., Walkerville, for valves.

SEWERS

Proposed Work

Mass., Lynn—City plans an expenditure of $50,000 for improving sewer system.

N. Y., Batavia—Citizens voted $17,000 bonds for repairs to sewer pumping plant.

N. Y., New York—(Borough of Manhattan)—Bids will be received Dec. 8 for repairs to barrel sewers under pier at foot of 36th St. and North River.

N. Y., New York—(Borough of Queens)—(Official)—Bids being received for sewers and catch basins in Willard and Hatch Ave., Woodhaven, about 1,600 ft. Louis Englehardt, Willard Ave., in charge.

N. Y., Wappinger Falls—City will vote for bond issue of $15,000 for completion of sewer system.

N. J., Hackensack—(Official)—Bids will be received by M. Demarest, Pres. of Hackensack Improvement Comn., Municipal Bldg., 346 State St., until 8 p.m., Dec. 6, for sewers in Passaic and State St.

N. J., Ridgefield Park—Bids will be received by H. F. Ayers, Chn. of Bd. of Village Comrs., until Dec. 7, for sewer system in West View Section.

Md., Baltimore—Bids will be received until Dec. 8 by Board of Awards, City Hall, for lateral sewers in District No. 38-A, Sanitary Contract No. 172.

W. Va., Kenova—Bids will be received about Dec. 23 for sewer system. Estimated cost, $55,000. Oliver & Maupin, Huntington, W. Va., Engr. Noted Nov. 18.

W. Va., Thurmond—See item under "Light, Heat and Power."

Fla., Ft. Myers—Citizens did not vote $25,000 bonds for improving sewer system as was noted in the issue of Nov. 25.

La., Donaldson—A. W. Jackman has applied to City Council for franchise to install sewerage system in Donaldson.

Ky., Lexington—Plans will be prepared for sewage disposal plant and sewer in North Main St. Estimated cost, $350,000. J. White Guyn, City Engr.

Ky., Owensboro—Contract for sewer system will be awarded about Jan. 15. Citizens recently voted $250,000 bonds for this purpose. Noted Oct. 21 and Nov. 18.

Ohio, Brewster—City will install sewer system. Estimated cost, $10,000.

Ohio, Cuyahoga Falls—Bids will be received by W. F. Williston, City Clk., until Dec. 14, for sewer construction. Estimated cost, $20,000. R. W. Pratt, 708 Hippodrome Bldg., Cleveland, Consult. Engr.

Ohio, Troy—Bids will be received by C. F. Rannells, Audr., until noon, Dec. 11, for purchase of $21,500 bonds for sewer construction .

Ind., Ft. Branch—Construction of sanitary sewer system and purification plant under consideration. Estimated cost, $15,000.

Ind., Greencastle—Plans being considered for sewage purification plant and sewer from Greencastle to Big Walnut Creek.

Ind., Vincennes—Plans being prepared for storm sewers in eastern and southeastern part of city. Estimated cost, $150,000. H. T. Watts, City Engr.

Mich., Flint—No bids were received for sanitary sewers in Wilcox St. from Flint River to Glenwood Ave. and in Decker St. from Cleveland Ave. to Poplar St. Work will be done under supervision of City Engineer.

Mich., Grand Rapids—Grandville Avenue Improvement Association interested in a project to secure sewer system for south and sauthwestern section of city. Estimated cost, $250,000.

Mich., Harbor Beach—Bids will be received by W. A. Trescott, City Clk., until 8 p.m., Dec. 8, for sanitary sewer system and disposal plant. R. W. Roberts, Saginaw, Engr.

Ill., East St. Louis—City plans an expenditure of $50,000 for repairing sewers. Work will be done under supervision of City Engineer.

Wis., Randolph—Citizens plan installation of sewerage system. Estimated cost, $15,000.

Iowa, Clinton—City contemplates sewers in Districts Nos. 7 and 8. J. G. Thorne, City Engr.

Iowa, Dubuque—City Council will construct 8-in. tile pipe sanitary sewer in St. Ambrose St. from present manhole at intersection of Willow and St. Ambrose St.

Iowa, Farragut—Surveys being made for sewer and drainage system. Estimated cost, $4,000.

Iowa, Ft. Madison—Contract will soon be awarded for two miles of sanitary sewers. R. J. Lewis, City Engr.

Iowa, Mason City—City plans to install sewage-disposal plant. Estimated cost, $100,000.

Iowa, Oskaloosa—Bids will soon be received by Black & Veatch, Engr., Kansas City, Mo., for sewer system. Noted Aug. 12 and Nov. 4.

Iowa, Sioux City—Bids will be received by P. J. Wells, City Clk., until Dec. 4, for sewer in Leech Ave. from South Fowler to South Westcott St.

Minn., Belle Plaine—Bids will be received until Dec. 13 for construction of sanitary sewers in Market St. from Minnesota River to Forest St., in Forest St. from Market St. to Meridan St., in Meridan St. from Forest St. to Prairie St.

Minn., Minneapolis—City plans to install two sewers.

Minn., South St. Paul—(Official)—Bids will be received by the City Clerk until Dec. 6 for sewer on Third St. and Third Ave. Estimated cost, $26,000. Contract recently awarded for this work has been ruled invalid. John Fearing, City Engr. Noted Nov. 4.

Minn., Virginia—Plans approved by City Council for construction of sanitary sewer through certain portions of Ridgewood addition.

Kan., Neodesha—Bids will soon be received by Black & Veatch, Engr., Kansas City, Mo., for sewage-disposal plant. Estimated cost, $50,000. Noted Nov. 11.

Neb., Pawnee City—Sewer system will be installed in city. Estimated cost, $35,000.

Neb., Wausa—Bids will be received about Jan. 1 for sewer system and sewage disposal plant. Estimated cost, $12,000. Noted Sept. 23.

S. D., Alexandria—Election will soon be held to vote on bonds to install sewer system.

S. D., Edgemont—Bids will be received by W. S. Wyatt, City Audr., until 8 p.m., Dec. 6, for constructing sewers in District No. 3.

N. D., Mandan—Bids will be received about Jan. 1 for installing drainage system and paving various streets. Estimated cost, $216,000. Black & Griffin, Consult. Engr. Noted Nov. 11.

Ark., Harrison—Sewer system will be constructed. Estimated cost, $65,000.

Tex., Belton—Citizens voted $40,000 bonds for sewer system.

Tex., Dallas—City will build storm sewer estimated to cost $5,000.

Tex., Houston—Ordinances passed by City Council authorizing an appropriation of $51,000 for storm sewers to drain Main St. between tracks of Galveston, Harrisburg & San Antonio Railway and Bellaire Blvd. and an appropriation of $21,000 for storm sewers on Hathaway St. from Baldwin to Crocker St.

Tex., Seguin—City plans installation of sewerage system.

Tex., Uvalde—Plans for proposed sewage-disposal plant submitted to E. R. Benson, City Engr., by N. Werenskiold, Dallas, Consult. Engr.

Tex., Winnsboro—J. D. Carter submitted plans for installation of municipal sewer system.

Okla., Commerce—Plans being considered by city for sewer system. Benham Engineering Co., Oklahoma, Engr.

Okla., Enid—City will build sewer system in three new sewer districts and make extensions in two districts. W. C. Rogers, City Clk.

Ariz., Miami—Election will be held Dec. 14 to vote on $60,000 bonds for sewerage system and sewage-disposal plant.

Wash., Seattle—Bids will soon be received by Board of Public Works for sewer system in Mead St. and 51st Ave. S.

Wash., Seattle—City Engineer has submitted report to Board of Public Works estimating cost of sewers in Fairmount Ave. at $60,893.

Ore., Mt. Angel—City Council has authorized construction of sewer system.

Calif., Auburn—(Official)—Citizens voted $15,000 bonds for extending sewer system. Noted Oct. 22.

Calif., Imperial—(Official)—We have been informed that election to vote on $100,000 bonds for improving sewer and water systems will not be held as stated in our issue of Nov. 11.

Calif., Pasadena—A tract of land comprising about 600 acres east of Coyote Pass, south of Alhambra, has been purchased by cities of Pasadena, South Pasadena and Alhambra to be used as a sewer farm.

Calif., Pomona—Special election will be held Jan 11 to vote on bonds for $15,000 for storm sewers. Noted Nov. 4.

Calif., San Francisco—Bids will soon be received by Board of Public Works for sewer system in South Bay View District. Estimated cost, $55,000.

Que., Montreal—Board of Control contemplates an expenditure of $1,022,320 for sewer work.

Que., Montreal—City plans to install collecting sewer in north of Island. Estimated cost, $500,000.

Ont., Toronto—R. C. Harris, Comr., has recommended the following work to the Board of Control: Sanitary sewers, $13,000; storm sewers, $43,500; asphalt paving, $126,800; asphaltic concrete paving, $4,400; brick block paving, $12,560.

Ont., Toronto—Bids will be received until Dec. 7 by Board of Control for sewer construction.

Man., Assiniboia—Bids will be received until noon, Dec. 6, by Frank Ness, Clk., Kirkfield Park, for constructing lateral sewers on a number of streets.

B. C., Vancouver—Plans for trunk sewer along south side of False Creek from Brewery Creek to China Creek trunk at Seventh Ave. and Keith Drive, will be submitted to Board of Works for approval. F. L. Fellowes, City Engr.

Bids In and Contracts Awarded

Mass., Boston—Contract for sewer pipe awarded to WALDO BROS., INC., Boston.

Mass., Boston—Contract for pipe sewers and drains awarded to M. DE SISTO, 198 La Grange St., West Roxbury, at $4,811.

N. Y., Fairport—Contract for East Church St. intercepting sewer awarded to BISHOP CONSTRUCTION CO., at $4,583.

N. Y., New York—(Borough of Manhattan)—(Official)—Bids were received for improving sewer in Cedar St. between Broadway and Nassau St. as follows: U. S. Drainage and Irrigation Co., $8,523; Lawrence Contracting Co., $9,283; Patrick Riley, $11,237.

N. Y., New York—(Borough of Manhattan)—(Official)—Contract for making repairs to barrel and box sewers at 26th St. and North River, 37th St. and East River, 110th St. and East River, 158th St. and North River, Third St. and East River, and Stanton and Rivington St., East River awarded to RIVERSIDE CONTRACTING CO. Noted Nov. 4 and 18.

N. Y., Yorktown Heights—Sewage Disposal and Water Co., Schenectady, at $71,115, submitted lowest bid for sewage disposal plant at Mahonsic State Hospital, and Frederick N. Lewis, New York, at $31,970, for plant at Yorktown Heights Training School for Boys. Noted Oct. 21.

N. J., Atlantic Highlands—Contract for extending sewer system awarded to R. W. SMITH CORPORATION, New York, N. Y. Estimated cost, $15,000.

N. J., Newark—Bids were received by Passaic Valley Sewerage Commission, Nov. 14, for Vailsburg sewers, southwesterly section ,as follows: James A. Christie, Newark, $9,711; Michael Stefanelli, $9,658; Peter D'Amato, Newark, $10,482. Noted Nov. 18.

N. J., Ocean Grove—(Official)—Contract for 10,800-ft. of vitrified pipe sewers awarded to LOGAN CONSTRUCTION CO., 13 Park Row, New York, N. Y., at $8,951. Noted Nov. 11.

Md., Baltimore—(Official)—Lowest bids received for (a) Locust Point Interceptor sewer, Sanitary Contract No. 168, Section 3, (b) Maiden Choice Run trunk sewer, Sanitary Contract No. 167, were as follows: (a) M. O'Harron & Son, $30,517; Smith & Ruggles, $30,824; Whiting-Turner Construction Co., $31,462; (b) Frank Carozza, $13,933; Boyle-Lohmuller Construction Co., $14,870; Whiting-Turner Construction Co., $15,198. C. W. Hendrick, Ch. Engr.

Md., Baltimore—Contract for sewers under Sanitary Contract No. 65 awarded to F. B. BEASMAN & CO., 7 Clay St., Baltimore.

Ohio, Lakewood—(Official)—Contract for sewer in Louis Drive awarded to JOSEPH WINTERBOTTOM, 3274 West 25th St., Cleveland, at $22,000. Noted Nov. 11.

Ohio, Sandusky—(Official)—Contract for intercepting sewer No. 2 awarded to J. B. SHEETS, Pittsburgh, Penn. Noted Nov. 4.

Ind., Indianapolis—Contract for sewer awarded to INDEPENDENT CONSTRUCTION CO., Terre Haute, at $9,500.

Mich., Marquette—Contract for improvement of sewer on Harrison St. awarded ROGER TANSEY.

Mich., Sault Ste. Marie—Contract for sewer work in Mission St. awarded to EDWARD O'DONNELL, at $5,155.

Iowa, Oakland—(Official)—Contract for 13,500-ft. of sewers to M. A. CAMERY, Harlan, at about $10,000. Noted Oct. 7 and 28.

Minn., Virginia—Contract for lateral sewer in Illinois St., Sixth to Ninth St., awarded to L. W. KELLEY.

N. D., Grand Forks—Contract for lateral sewer No. 18, District No. 5, awarded to CARROLL BROS., Grand Forks. Noted Nov. 4.

N. D., Wahpeton—Contract for extending sewers in Districts 1 and 3, awarded to AIKEN CONSTRUCTION CO., Fargo, N. D. Noted Oct. 22.

Tex., Houston—Lowest bids received for sewerage work were as follows: Storm sewer on Hawthorne St., F. D. Horton & Son., at $16,883; Smith St. sewer, H. C. Hunter, at $4,2[illegible]; storm sewer on Bagby and Laure St., Hardman & Nelson, at $13,809.

Idaho, Kellogg—Contract for sewer in Pressley Addition awarded to NELS ERICKSON, Anacortes, Wash. Noted Nov. 4.

Wash., Seattle—Washington Paving Co., at $78,694, submitted lowest bid for sewers in Sixth Ave., N. W. Noted Aug. 12.

Calif., Los Angeles—S. Zarubica, at $7,577, submitted lowest bid for sewer in Pico St. from Grenshaw Blvd. to Sixth Ave.

Ont., Hamilton—BRENNAN & HOLLINGWORTH, Hamilton, awarded contract for sewer in Kenilworth Ave.

GARBAGE

Proposed Work

Penn., Altoona—City contemplates building garbage crematory. George W. Kuebler, Comr. of Pub. Safety. Estimated cost, $25,000.

Ohio, Canton—Council contemplates garbage disposal plant and system of free city collection.

Wis., Madison—Preliminary plans being prepared by F. C. Parker, City Engr., for garbage disposal system for city, including two incinerating furnaces. Estimated cost, $25,000. Noted Oct. 14.

Wis., West Allis—Bids will soon be received by the city for municipal garbage incinerator. Estimated cost, $5,000. E. G. Orbert, Engr.

Bids In and Contracts Awarded

Mich., Detroit—Contract for disposal of city's garbage awarded to DETROIT REDUCTION CO.

Ill., Decatur—Alfs Garbage Co. awarded contract to BOILER EFFICIENCY ENGINEERING CO., 608 South Dearborn St., Chicago, Ill., for garbage incinerator. Estimated cost, $10,000.

STREETS AND ROADS

Proposed Work

N. Y., New York—(Borough of Manhattan)—(Official)—Bids will be received by Marcus M. Marks, Borough Pres., Room 2032, Municipal Bldg., until 2 p.m., Dec. 6, for regulating and repaving 151st St. from west side of Seventh Ave. to east side of McCombs Pl.

N. Y., New York—(Borough of Manhattan)—(Official)—Bids will be received by R. A. C. Smith, Comr. of Docks, Pier "A," Battery Pl., North River, until 10 a.m., Dec. 6, for repairing pavement on marginal street and piers, North, East and Harlem River.

N. Y., Rockville Center—Press reports state that a boulevard will be constructed from Rockville Center to Long Beach. Estimated cost, $500,000.

Penn., Yardley—Bonds for $10,000 voted by citizens for street improvements.

Va., Richmond—Construction of Northside Blvd. under consideration by City Council. Estimated cost, $500,000.

N. C., Bladenboro—Bonds for $25,000 voted by citizens of Bladenboro Township for road construction.

N. C., Franklin—Bonds for $15,000 for improving a number of roads defeated by citizens of Macon County, Cowee Township. Noted Oct. 28.

N. C., Snow Hill—Bids will be received until Dec. 6 by Commissioners of Greene County for constructing sand clay roads. Estimated cost, $32,500.

Fla., Ft. Lauderdale—Election will be held Dec. 11 to vote on $165,000 bonds for roads and bridges for Broward County. Noted Nov. 11.

Fla., St. Petersburg—City plans to extend and pave Eighth Ave. with brick.

Ala., Bay Minette—Bids will be received until Dec. 14 by Commissioners of Baldwin County for road from Point Clear to Fairhope.

Ala., Birmingham—City plans to pave South 26th St. from Sixth to Eighth Ave. with asphaltic concrete. Estimated cost, $6,400.

Miss., Port Gibson—Plans being considered by Board of Supervisors of Claiborne County to issue $100,000 bonds for about 50 miles of gravel roads.

Tenn., Knoxville—Knox County Roads Commission plans to build a boulevard through Cherokee Purchase.

Tenn., Memphis—Plans being prepared by B. A. Adams, Park Engr., for first stretch of proposed parkway to encircle city.

Ohio, Eaton—City plans to pave Barron and Maple St.

Ohio, Greenville—See item under "Canal Ditches and Irrigation."

Ohio, Hillsboro—Bids will be received until noon, Dec. 13, by Commissioners of Highland County, for purchase of $7,500 bonds for road construction.

Ohio, Sandusky—City plans to pave East Ninth St. from Remington Ave. to corporation line. Estimated cost, $13,370.

Ohio, Troy—Bids will be received until noon, Dec. 11, by C. F. Rannells, Audr., for purchase of $36,700 bonds for street improvements.

Ohio, Washington C. H.—Bids will be received by John McFadden, City Audr., until Dec. 20, for purchase of $5,800 bonds for improving East Court St.

Ind., La Porte—(Official)—Bids will be received in January for about 38,000 sq.yd. of paving. L. D. Goddard, 410 First National Bank Bldg., City Engr.

Ind., Michigan City—Bids will be received until Dec. 14 by Board of Public Works for paving with brick Center St. and Lake Ave.

Mich., Sault Ste. Marie—Bids will be received by H. A. Osborn, County Rd. Comr., until 3 p.m., Jan. 13, for 24½ miles of highway.

Ill., Averyville—Election will be held Dec. 14 to vote on $4,000 bonds for paving Narrows Rd. with brick.

Ill., Elgin—City Council plans to repave Grove St. with brick. Estimated cost, $16,150.

Ill., La Salle—Press reports state that La Salle Commercial Association contemplates bond issue for $1,500,000 for highway improvements.

Ill., Morrison—Press reports state that election to vote $125,000 bonds for road construction in Whiteside County contemplated.

Wis., La Crosse—La Crosse County has appropriated $80,000 for road construction during 1916.

Wis., Madison—City Council appropriated $25,000 to street improvement fund for coming year, making total $150,000.

Minn., Anoka—County plans an expenditure of $31,500 in 1916 for roads and bridges.

Minn., Brainerd—City plans an expenditure of $70,000 in 1916 for road improvements.

N. D., Mandan—See item under "Sewers."

Neb., Lincoln—Two new paving districts formed providing for paving of Tenth St. from E to F St., F St. from Seventh to Tenth St. and Sewell St. from Seventh to 24th St.

Mo., Bolivar—Citizens of Polk County, Bolivar Special Road District, voted $25,000 bonds for road improvements. Noted Oct. 28.

Mo., Poplar Bluff—Commissioners of Butler County contemplate election to vote on $275,000 bonds for road improvements.

Tex., Clarksville—(Official)—Bids will be received by George Morrison, Judge, Red River County, until noon, Dec. 9, for system of highways including bridges, culverts, etc., for Road District No. 1, Red River County.

Tex., Beaumont—Contract for highways between Hardin, Liberty and Jefferson Counties will not be awarded to Hanson Sons, Inc., until the bonds are O. K'd. by the court. Noted Oct. 28.

Tex., Risk—Bonds for $150,000 for road construction defeated by citizens of Cherokee County Road District No. 1. Noted Oct. 28.

Tex., Sweetwater—Election will be held in Nolan County Dec. 18 to vote on $100,000 bonds for road construction.

Tex., Texarkana—Commissioners of Bowie County voted to appropriate $20,000 for improving roads in Precinct No. 1.

Okla., Catoosa—Bonds for $18,000 voted by citizens for road construction. Noted Nov. 11.

Okla., Chelsea—Citizens voted $50,000 bonds for road construction. Noted Nov. 11.

Okla., Claremore—Citizens of Oowala Township voted $30,000 bonds for road construction. Noted Nov. 11.

Okla., Foyil—Citizens voted $25,000 bonds for constructing roads. Noted Nov. 11.

Okla., Inola—Citizens voted $30,000 bonds for road construction. Noted Nov. 4.

Okla., Oolgah—Citizens voted $20,000 bonds for road construction.

Okla., Talala—Bonds for $20,000 voted by citizens for road construction. Noted Nov. 11.

Okla., Wister—Bonds for $45,000 voted by citizens for road work.

Colo., Pueblo—Plans for paving area on north side between Second and Tenth St. being considered. Estimated cost, $20,000.

Idaho, Wallace—City Council plans an expenditure of about $18,000 for paving District No. 4.

Ariz., Globe—Bonds for $350,000 voted by citizens of Gila County for road construction. Noted Nov. 11.

Wash., Olympia—Bids will be received until Dec. 20 by State Highway Commission for constructing 35 miles of Inland Empire Highway.

Calif., Alameda—City plans to pave Central Ave. from Fernside Blvd. to Fourth St. About $100,000 available for this purpose.

Calif., Pasadena—Bids will be received by H. Dyer, City Clk., until Dec. 13, for paving Hillside Terrace.

Calif., Pomona—Election will be held Jan. 11 to vote on $20,000 bonds for improving a number of streets.

Calif., San Francisco—Board of Public Works plans an expenditure of about $25,000 for paving portions of Alison and Bay View St.

Ont., Toronto—See item under "Sewers."

Bids In and Contracts Awarded

Conn., Hartford—Framingham Contracting Co., South Framingham, Mass., at $8,490, submitted lowest bid for native stone macadam road in Weston Township, and Frank Arrigoni & Bro., Middletown, at $6,763, submitted lowest bid for trap rock macadam on Middlefield Rd., Middletown Township.

N. Y., New York—(Borough of Manhattan)—(Official)—Lowest b'ds received for improving (a) 145th St. from west side of Lenox Ave. to east side of Seventh Ave., (b) Columbus Ave. from 96th St. to Cathedral Parkway, (c) 96th St. from Second Ave. to a point east of easterly house line of Lexington Ave., were as follows: (a) (b) Asphalt Construction Co., Madison Ave. and 137th St., New York, at $8,786; (c) W. J. Fitzgerald, 547 West 45th St., New York, at $7,186. Noted Nov. 23.

N. Y., New York—(Borough of Queens)—(Official)—Bids were received Nov. 22 for improving a number of streets and avenues of the borough as follows: Charles A. Myers Contracting Co., $5,331; Peace Bros., 20 Main St., Flushing, $6,672; Frank Chiullia, Belle Harbor, $6,859. Noted Nov. 18.

N. J., Bloomfield—(Official)—Bids were received Nov. 15 for 123,000 lin. ft. of 5-in. by 16-in. bluestone curb and 6,000 lin. ft. combination curb and gutter as follows: Filippone Scanniello, $8,512; C. S. Carracino, $8,957; Robert Doriety, $9,091. Noted Nov. 11.

N. J., Newark—Contract for improving South Orange Ave. from 20th St. to South Orange Village line awarded to GLENFIELD CONSTRUCTION CO., at $87,845. Noted Nov. 18.

N. J., Perth Amboy—Contract for improving Convery Pl. awarded to GRAHAM & McKEON.

Md., Easton—Lowest bids received Nov. 9 for constructing highways by State-Aid were as follows: Contract No. 401, 1.06 miles of shell or macadam or concrete road from Easton to Easton Point, Holt Construction Co., Denton, at $10,603; Contract No. 361, three miles from Easton toward Mathews, Juniata Paving Co., Empire Bldg., Philadelphia, Penn., at $20,199 for macadam, $24,424 for concrete and $16,150 for shell. Noted Nov. 4.

W. Va., Charleston—Contract for 1½ miles of warrenite road in London and Polka District awarded to ATLANTIC BITULITHIC CO., at $36,855. Noted Nov. 11.

N. C., Charlotte—Bids were received Nov. 11 for 17,500 sq.yd. of paving as follows: A. H. Guion & Co., Gastonia, $20,505; J. W. Haas, Charlotte, $21,943; Blankenship & McClelland, Charlotte, $21,050. Noted Nov. 4.

S. C., Greenville—(Official)—Bids were received Nov. 10 for 60,000 sq.yd. of street paving, 10,000 sq.yd. of concrete gutters, and 12,000 lin.ft. of granite curb, (a) sheet asphalt, (b) asphalt concrete, (c) brick, (d) concrete, (e) bitulithic, (f) rocomac, as follows: Noll Construction Co., Chattanooga, Tenn., (a) $111,248; Gulf Paving Co., Chattanooga, Tenn., (a) $105,753, (b) $96,153; Southern Paving and Construction Co., Chattanooga, Tenn., (a) $105,585, (b) $97,785, (c) $140,385; West Construction Co., Chattanooga, Tenn., (b) $97,450; William P. McDonald Construction Co., Mt. Vernon, N. Y., (c) $150,490; F. J. McGuire, Norfolk, Va., (c) $150,560, (d) $112,160, (f) $112,160; Case & Cothran, Atlanta, Ga., (d) $109,128; J. F. Morgan & Co., Attalla, Ala., (d) $110,575, (f) $112,975; Atlantic Bitulithic Co., Boston, Mass., (e) $159,002; R. M. Hudson, Atlanta, Ga., (f) $111,694. Noted Nov. 4.

Fla., Miami—Contract for constructing sidewalks on Ave. D from 20th to 25th St. and Eighth St. and Boulevard awarded to F. L. DE VANE.

Fla., Sarasota—Contract for paving, curbing and guttering awarded to SOUTHERN ASPHALT AND CONSTRUCTION CO., Birmingham.

Fla., Tampa—Contract for paving Hyde Park Pl. awarded to GEORGIA ENGINEERING CO.

Ala., Dothan—Contract for 21 miles of road awarded to BOYD & BRADSHAW and JORDAN & PHILLIPS. Estimated cost, $100,000. Noted Nov. 4.

Tenn., Chattanooga—Contract for paving Chestnut St. from 9th to 10th St. awarded to SOUTHERN PAVING AND CONSTRUCTION CO., at $5,277.

Ky., Lebanon—Marion County Commissioners awarded contract to T. M. ESTES and FORREST WARD, at $13,420, for improving Bradfordsville Pike from Lebanon to Bradfordsville, nine miles.

Ky., Morganfield—Union County Commissioners awarded contract for improving Uniontown and Boxville Rds. to COLLINS & PAVY, Mt. Vernon, Ill., at $28,508. Noted Oct. 28.

Ohio, Akron—Contract for paving George Rd. awarded to J. C. DEVINE, Alliance.

Ohio, Cincinnati—(Official)—Contract for improving Summit Ave. in Springfield and Sycamore Township awarded to WILLIAM P. FLYNN, 1252 Chase St., Cincinnati, at $4,744. Noted Nov. 11.

Ind., Indianapolis—Contract for Pleasant Run Parkway awarded to C. C. KING & SON, at $22,986.

Ind., Vincennes—Contracts for gravel roads awarded as follows: Volmer Rd., Johnson Township, to H. F. JONES, Vincennes, at $4,907; Brooks Rd., Vincennes Township, to JOHN E. MILLIGAN, Vincennes, at $3,500.

Mich., Pontiac—Contract for completing concrete road between Kimble's Corners and Birmingham on Detroit Rd. awarded to R. D. BAKER & CO., Detroit, at $62,090. Noted Nov. 25.

Ill., Springfield—Contract for paving Converse Ave. from 11th St. to Michigan Ave. awarded to HENRY MELCH & SON.

Ill., Berwyn—(Official)—R. F. Conway Co., Chicago, at $68,459, submitted lowest bid for paving a number of streets.

Kan., Iola—Contract for paving on South Chestnut St., North Chestnut St. and alley in rear of Physicians & Surgeons Hospital awarded to HANREDDY & ROSS, at $7,000.

Neb., Lincoln—Burke-Cochrane Construction Co. submitted lowest bid for paving of District No. 9. Noted Oct. 7 and Nov. 11.

Mo., Springfield—Contract for 9¾ miles of road in Ingram Special Road District awarded to OTTO CHAPMAN, Strafford, at $22,000. Noted Oct. 21.

Mo., Springfield—Contract for paving awarded to PLUMMER-ADAMS CO., at about $13,500.

Ark., Ravenden Springs—Contract for pike road between city and Ravenden Station awarded to H. C. NIXON, Argenta, at $18,000.

Tex., Eagle Lake—Contractor for graveling streets awarded to F. E. BOOTHE; about $12,000 available for this work.

Tex., Ft. Worth—Contract for paving Sunset, Jarvis and Daggett Ave. awarded to GENERAL CONSTRUCTION CO., Ft. Worth; Fifth Ave. and Jessamine St. to TEXAS BITULITHIC CO., Dallas.

Tex., Georgetown—Contract for 55 miles of gravel and macadam road awarded to J. S. TOBY & CO., Ft. Worth, at $114,000.

Tex., Houston—Contract awarded to HORTON & HORTON, Houston, for paving with Uvalde rock asphalt intersection of Stratford and Connor St. with Lovett Blvd. Estimated cost, $4,500.

Tex., Kountze—Hardin County Commissioners awarded contract to COBB & GREGORY for shell road from Pine Island Bayou to Kountze. Estimated cost, $75,000.

Tex., Livingston—Contract for street improvements awarded to J. G. BROWNE CO., Houston, at $27,600.

Okla., Oklahoma—Contract for paving awarded to WESTERN PAVING CO., Oklahoma, at $29,496.

Okla., Okmulgee—Contract for improving number of streets awarded to PARKS & MORAN, Okmulgee, at $69,853. Noted Oct. 28.

Colo., Del Porte—(Official)—All bids received Nov. 10 for eight miles of State Primary Rd. No. 60 rejected as being too high.

Calif., Sacrementa—(Official)—Contract for road work in Sonomo County, Division 4, Route 8, Section A, awarded to BATES, BORLAND & AYER, Oakland Bank of Savings Bldg., Oakland, at $22,183. Noted Oct. 7 and Nov. 4.

Calif., San Francisco—Contracts for paving awarded to FEDERAL CONSTRUCTION CO., at $17,110, for Corbett Ave. between Danvers St. and Caselli Ave., and to C. B. EATON, at $16,408, for Congo St. between Flood Mangels Ave.

Calif., San Gabriel—(Official)—Contract for improving a portion of Las Tunas Drive awarded to M. R. CO., INC., Fernando Bldg., Los Angeles, at $17,930. Noted Nov. 11.

Calif., Santa Monica—Contract for improving Central Ave. from Eighth St. to city limits awarded to NATIONAL PAVING CO., Kansas City, at $50,810.

Calif., South San Francisco—Contract for paving and constructing sidewalks awarded to F. R. RITCHIE & CO., Chronicle Bldg., San Francisco, at $8,074 and $7,883, respectively.

INDUSTRIAL WORKS

Proposed Work

Conn., Hartford—United States Tire Co. contemplates building additions to plant at Allyn and High St. Charles B. Wittlesey, Gen. Mgr.

Conn., New Haven—Revised plans will be prepared by R. W. Foote, 185 Church St., New Haven, Arch., for three-story, 65x75-ft. garage and salesroom for Cowles Tolman. Estimated cost, $30,000. Noted Aug. 12.

Conn., Thompsonville—Biglow-Hartford Carpet Co., 58 Main St., will build two additions to plant in spring.

N. Y., Buffalo—George Miller Spring Tire Co., recently incorporated, will establish factory. W. L. Williams, interested.

N. Y., Buffalo—Schoellkopf Analine Chemical Works, Inc., plans to build addition to plant at 351 Abbott Rd. Estimated cost, $13,513.

N. Y., New York—(Borough of Brooklyn)—(Official)—Plans being prepared by W. T. McCarthy, Arch., 16 Court St., for two-story, 100x100-ft. brick factory on Harrison St. for A. L. Fogel, 534 Myrtle Ave. Estimated cost, $12,000.

N. Y., New York—(Borough of Brooklyn)—Soss Manufacturing Co., 435 Atlantic Ave., will build four-story factory at Grand Ave. and Bergen St. Estimated cost, $60,000.

N. J., Bloomfield—International Arms and Fuse Co. will build addition to its plant. Estimated cost, $80,000.

N. J., Harrison—Plans prepared for three-story brick and steel plant on Fourth St. for Crucible Steel Co., 420 Canal St., New York, N. Y.

N. J., Pompton Lakes—Contract will soon be awarded for building addition to cap works of Du Pont Powder Co. Estimated cost, $100,000. H. K. Babbitt, Supt. of Cap Works.

Penn., Danville—Charles M. Schwab secured control of Danville Structural Tubing Co. and will build steel mill. Estimated cost, $600,000.

Penn., Donora—United States Steel Corporation will improve Donora plants. Estimated cost, $350,000.

Penn., Harrisburg—Plans being prepared by C. H. Kain, Arcade Bldg., for five-story brick and concrete factory at State and Cameron St. for Dauphin Cigar Co. Estimated cost, $40,000.

Penn., Philadelphia—Contract will soon be awarded for four-story, 89x98-ft. brick and reinforced-concrete shop at 18th and Buttonwood St. for Baldwin Locomotive Works, Broad and Spring Garden St.

Penn., Philadelphia—Plans prepared for three-story, 100x100-ft. ice-cream factory at 3333 Ludlow St., for Supplee Alderney Dairies Co. Estimated cost, $35,000. Charles H. Casper, Arch. Noted Nov. 25.

Penn., Pittsburgh—Pittsburgh Gage and Supply Co. will build addition to plant at 13th and Liberty St. Estimated cost, $15,000. W. G. Wilkins Co., Arch.

Penn., Port Carbon—Coxe Traveling Grate Co. plans to enlarge its plant. Estimated cost, $100,000.

Penn., Pottstown—Plans prepared for improvements to plant of McClintic-Marshall Structural Co., which includes factory, office building, 390x618-ft. main shop and installing cranes and hoists. Estimated cost, $1,000,000.

Penn., South Bethlehem—Bethlehem Steel Co. will rebuild plant recently destroyed by fire.

Md., Baltimore—Plans being prepared for two-story garage at 25-33 West Mt. Royal Ave. for W. H. Marcus, 525 Equitable Bldg.

Md., Baltimore—Plans being prepared by C. N. Fiz, Arch., Baltimore, for four-story garage and repair shop at 27 South Charles St. for Mid-City Garage and Motor Supply Co. Estimated cost, $90,000.

N. C., Greensboro—It is reported that American Agricultural Chemical Co., 2 Rector St., New York, N. Y., contemplates building fertilizer factory at Greensboro. Estimated cost, $100,000.

N. C., New Bern—Shops of Norfolk Southern R.R., recently destroyed by fire, will be rebuilt. F. L. Nicholson, Norfolk, Ch. Engr.

Ga., Columbus—It is reported that Hardaway Cargill Co. will build plant at Sixth Ave. and Tenth St. Estimated cost, $100,000.

Ga., Waycross—Ware County Light and Power Co. granted permit by City Council for abattoir and cold-storage plant. Estimated cost, $100,000.

Fla., Tampa—Hillyer & Spearing will remodel building on East Bay St. for warehouse. Estimated cost, $50,000.

Ala., Birmingham—A plant for the manufacture of automobile tires will be constructed in Birmingham. Estimated cost, $500,000. C. E. Frost, Athens, interested.

Ala., Birmingham—Plans prepared for 60x150-ft. bakery for Birmingham Bread Co.

La., Shreveport—Allen Mfg. Co. will build a plant at Shreveport. Estimated cost, $20,000.

Tenn., Chattanooga—Marion Extract Co., Marion, Va., purchased site at Chattanooga and will build plant to manufacture tannic acid from chestnut oak. Estimated cost, $150,000.

Tenn., Columbia—Columbia Ice and Cold Storage Co. will build two-story addition to plant.

Ky., Ashland—Kentucky Solvay Co. contemplates building plant to manufacture dyes from coal by-products. Estimated cost, $150,000.

Ky., Ashland—Plans being prepared for two-story, 50x120-ft. garage for W. B. Whitt & Son, McGlone. J. B. Gieseke, Ceredo, W. Va., Arch.

Ohio, Canton—Canton Clay Products Co., recently incorporated with $75,000 capital stock, plans to build a brick plant about one mile east of Robertville station on Wheeling & Lake Erie R.R.

Ohio, Canton—Globe Motor Car Co. will build four-story, 60x200-ft. salesroom and garage. Estimated cost, $80,000. J. H. Wile, 410 Wick Bldg., Youngstown, Arch.

Ohio, Carthage—(Cincinnati post office)—Contract will soon be awarded for 200x200-ft. addition to plant of Hess Springs and Axle Co. Estimated cost, $40,000. Noted Nov. 25.

Ohio, Celina—Plans being prepared by A. C. DeCurtins, Arch., 503 Opera House Bldg., Lima, for three-story, 60x125-ft. factory for Mersman Bros. & Brandt.

Ohio, Cincinnati—Peters Cartridge Co. will build plant at Kings Mills and Fosters Crossing. Estimated cost, $200,000. Leden & Schilling, Detroit, Mich., Arch.

Ohio, Cleveland—Plans prepared for automobile salesroom for Adams Oakland Co. Estimated cost, $100,000. W. S. Ferguson Co., 1900 Euclid Ave., Arch.

Ohio, Cleveland—East Ohio Gas Co. will build three-story warehouse on Rockwell St. Estimated cost, $12,000. Frank Horneck, Rose Bldg., Arch.

Ohio, Cleveland—Plans being prepared for 12-story addition to plant of William Edwards Co., West Ninth St. W. S. Lougee, Marshall Bldg., Engr.

Ohio, Cleveland—Plans being prepared by Poe Engineering Co., Rockefeller Bldg., for two factory buildings, 75x225 ft. and 75x100 ft., for Horsburgh Forging Co., 5102 Hamilton Ave.

Ohio, Cleveland—Hydraulic Pressed Steel Co. plans to build three additions to plant at 3152 East 61st St. Estimated cost, $50,000.

Ohio, Cleveland—Winton Motor Carriage Co. will build 80x300-ft. addition to plant on Berea Rd.

Ohio, Columbus—Central Ohio Paper Co. will build three-story, 63x120-ft. plant. Estimated cost, $35,000.

Ohio, Dayton—Plans prepared by Peters, Hermann & Brown, Reibold Bldg., for four-story reinforced-concrete plant on Fifth St. for Dayton Pure Milk and Butter Co., 219 East Fifth St.

Ohio, Euclid—White Automobile Co., Cleveland, purchased site at Euclid and will build plant. Plant will be built in sections as business demands. Estimated cost of first section, $200,000. Rolin H. White, interested.

Ohio, Fostoria—Fostoria Light Car Co. will enlarge its plant at Fostoria.

Ohio, Kent—Mason Tire and Rubber Co., Cleveland, secured site at Kent and will build factory. Estimated cost, $60,000.

Ohio, Salem—Andalusia Dairy Co., 105 Ferry St., contemplates building addition to plant. Estimated cost, $40,000.

Ind., Indianapolis—Preliminary plans being prepared by C. B. Comstock, 110 West 14th St., New York, N. Y., for four-story, 98x246-ft. baking plant for Bryce Baking Co.

Mich., Grand Rapids—Plans being prepared by John Ahlschlager & Son, Arch., Chicago, Ill., for two-story plant for Grand Rapids Baking Co. Estimated cost, $60,000.

Mich., Marquette—Nufer Cedar Co. plans to build plant at Marquette. William L. Nufer, interested.

Mich., Muskegon—Continental Motor Manufacturing Co. will build 80x100-ft. plant at Market and Jefferson St.

Mich., St. Johns—Ford Motor Co. will build two-story, 80x100-ft. garage at West Higham and Brush St.

Ill., Champaign—Plans being prepared for plant for Champaign News. Estimated cost, $50,000.

Ill., Chicago—Chicago & Northwestern R.R. will erect grain elevator for Armour Grain Co. at South Chicago. Estimated cost, $2,000,000.

Ill., Chicago—Chicago Nut Co. will build two-story, 100x150-ft. factory at 2513 West 29th St. Estimated cost, $38,000. R. E. Pingrez, Arch.

Ill., Chicago—Fisher Furniture Co. will build three-story factory at 400 North May St. Estimated cost, $25,000. F. E. Danielson, Arch.

Ill., Chicago—Swift & Co. will build six-story soap factory at 42nd and Justine St. Estimated cost, $30,000. B. H. Jilson, 9542 South Seeley Ave., Arch.

Ill., Kewanee—Farmers Elevator Co. will build grain elevator with capacity of 40,000 bu.

Wis., Madison—Plans being prepared by Gardner & Lindberg, Arch., 1130 South Dearborn St., Chicago, Ill., for packing plant for Farmers Co-Operative Packing Co. Estimated cost, $200,000. Noted Nov. 11.

Iowa, Des Moines—Plans being prepared by Proudfoot, Bird & Rawson, Arch., Hubble Bldg., for seven-story, 66x68-ft. building at Fourth St. and Ft. Dodge, Des Moines & Southern R.R. for Charles Hewitt & Son. Estimated cost, $100,000.

Minn., Minneapolis—Chevrolet Motor Co. will build assembling plant.

Minn., Moose Lake—John Keogh Co., Chicago, Ill., will build plant for manufacture of excelsior and wood wool. Estimated cost, $25,000.

Wyo., Sheridan—National Life Preserver Co., recently incorporated with $175,000 capital stock, plans to establish a factory at Sheridan. O. A. Youngren, interested.

Mo., Trenton—Ice plant will be constructed by Trenton Gas and Electric Co. Estimated cost, $36,000.

Ark., Stamps—Bodcaw Lumber Co. will rebuild warehouse recently damaged by fire with a loss of $200,000.

Ark., Trumann—Ozark Cooperage and Lumber Co. will build plant. Estimated cost, $125,000.

Tex., Dallas—Plans being prepared for automobile assembling plant for Chevrolet Motor Co. Estimated cost, $250,000.

Tex., Dallas—Press reports state that Union Terminal Co. will construct additional buildings including boiler house, turntable, signal house, etc. Estimated cost, $100,000. C. H. Dana, Ch. Engr.

Tex., Port Aransas—Fisheries Co., recently incorporated with $450,000 capital stock, will build a plant on St. Joseph's Island. J. W. Munn, Pres.

Okla., Enid—Plans being prepared for two-story, 25x160-ft. reinforced-concrete factory for Mitchell Bakery Co. Estimated cost, $12,000. R. W. Shaw, Arch.

Okla., Miami—Trustees Mining Co. will build 200-ton mill at Miami.

Colo., Buena Vista—National Manufacturing Co. contemplates building smelting and cyanide plant. Estimated cost, $85,000.

Colo., Kline—Farmers Equity Association contemplates building flour mill. Estimated cost, $50,000.

Ariz., Miami—Election will be held Dec. 16 to vote on $18,000 bonds for municipal ice plant.

Wash., Odessa—Plans being prepared by Whitehouse & Price, Arch., Spokane, for two-story reinforced-concrete garage for Odessa Hardware and Improvement Co. Estimated cost, $20,000.

Wash., Spokane—Plans prepared for five-story, 60x100-ft. warehouse on Stevens St., for McClintock Trunkey Co. Bids will be received after the first of year. Estimated cost, $50,000. Noted Aug. 5.

Wash., Tacoma—Company organized by A. A. Dunewald, J. G. Anderson and J. A. Wright for the purpose of building a plant for the manufacture of milk bottles from wood plup. Estimated cost, $75,000.

Ore., Portland—Plans being prepared by N. M. Loney, Engr., for branch plant for American Can Co. Estimated cost, $600,000.

Ore., Portland—Rasmussen & Co. will build ten-story warehouse. Estimated cost, $50,000.

Calif., Los Angeles—Plans being prepared by Morgan, Walls & Morgan, Arch., Van Nuys Bldg., for four-story warehouse on Banning St. for Los Angeles Soap Co.

Calif., San Francisco—Plans prepared for two-story reinforced-concrete garage and repair shop for J. K. Bigelow. Estimated cost, $35,000. August G. Headman, Arch.

N. B., Washademoak—Daley & Carvell, St. John, purchased site at Washademoak and will build factory.

Ont., Kincardine—William Mitchell & Co. contemplates building knitting mill.

Ont., Petrolia—Marine City Sugar Co. contemplates establishing plant at Petrolia. Estimated cost, $800,000.

Ont., Port Dover—Port Dover contemplates building factory. Estimated cost, $10,000. W. Carson, Mgr.

Ont., Toronto—Plans approved for three-story reinforced-concrete building at Walmer Rd. and Bridgman St., for Farmers Dairy Co. Estimated cost, $50,000. Noted Nov. 25.

Bids In and Contracts Awarded

Conn., New Britain—Hart & Cooley Manufacturing Co. awarded contract for two-story addition to plant on Booth St. to B. H. HIBBARD CO. Estimated cost, $20,000.

Conn., Waterbury—(Official)—Contract for two-story reinforced-concrete oil-storage building for Scovill Manufacturing Co. awarded to TURNER CONSTRUCTION CO., 11 Broadway, New York, N. Y.

N. Y., New York—(Borough of Brooklyn)—(Official)—Contract for four-story, 80x100-ft. milk plant at Dean St. and Third Ave., for R. F. Stevens Co., Third Ave. and Dean St. reawarded to JAMES McARTHUR, 22 Ormund Pl. Estimated cost, $140,000. Noted Apr. 22 and 29.

N. J., Bayonne—(Official)—Vacum Oil Co. awarded contract to TURNER CONSTRUCTION CO., 11 Broadway, New York, N. Y., for three-story reinforced-concrete filter building.

Penn., Philadelphia—American Ice Co. awarded contract for enlarging its ice-manufacturing plant at Belfield Ave. and Reading R.R. to TURNER CONCRETE AND STEEL CO., 1713 Sansom St. Estimated cost, $50,000. Noted Sept. 23.

Penn., Philadelphia—Contract awarded to SMITH-HARDICON CO., 1606 Cherry St., for building two-story, 74x150-ft. factory at American and Filbert St., for J. D. Litt. Estimated cost, $30,000.

Penn., Pittsburgh—Pennsylvania R.R. awarded contract to W. F. TRIMBLE & SONS CO. for three-story, 40x449-ft. top addition and one-story, 27x583-ft. side addition to freight warehouse.

Md., Baltimore—Baltimore Buggy Top Co. awarded contract for one-story, 76.4x124x49-ft. addition to plant to McLAUGHLIN BROS., INC., 915 Bolton St.

Md., Sparrows Point—Maryland Steel Co. awarded contract for 75x625-ft. foundry to WEST CONSTRUCTION CO., Knickerbocker Bldg., Baltimore. Estimated cost, $350,000.

Ohio, Cleveland—American Multigraph Co., Kelly Ave. and East 40th St. awarded general contract to MASTERS & MULLEN CONSTRUCTION CO., Electric Bldg., for one-story addition. Estimated cost, $25,000.

Ohio, Cleveland—Contract awarded to REAUGH CONSTRUCTION CO., 2835 East 51st St., for two-story garage for East Ohio Gas Co. Estimated cost, $50,000.

Ohio, Cleveland—Oster Manufacturing Co., East 61st St., awarded contract for factory to BOLTON PRATT CO., Columbia Bldg. Estimated cost, $50,000. Noted Sept. 23.

Ohio, Cleveland—Jacob Spang Baking Co., Barber Ave. and West 30th St., awarded general contract for reinforced-concrete building to H. E. KLEFMAN & CO., 4319 Woodbridge Ave. Estimated cost, $12,000.

Ohio, Cleveland—The Superior East 105th Realty Co. awarded contract to METTLER-GLOYD CO., Hippodrome Bldg., for one, two and three-story garage and store building at Superior Ave. and East 105th St. Estimated cost, $49,000.

Ohio, Dayton—Ohio Metal Product Co., 39 Edgar St., awarded contract to JOHN ROUSER CO., Dayton, for three-story brick and steel addition to plant. Noted Nov. 11.

Ohio, East Akron—American Hard Rubber Co. awarded contract to KIDDER & McCOURT for five-story, 150x400-ft. plant.

Ohio, Toledo—Contract awarded to WALLS, BOCH & KUHLMAN for addition to plant of Toledo Machine and Tool Co., 1736 Dorr St. Estimated cost, $55,000. Noted Oct. 28.

Ind., Gary—American Sheet and Tin Plate Co. awarded concrete foundation contract for tin mills to ILLINOIS IMPROVEMENT AND BALLAST CO., 208 South La Salle St., Chicago, Ill. Estimated cost, $156,000. Noted Nov. 25.

Mich., Grand Rapids—Blue Valley Creamery Co. awarded contract to SCHREIMER & SCHUUR for two-story, 60x113-ft. brick and concrete plant. Estimated cost, $11,000.

Mich., Holland—Holland Furnace Co. awarded contract for 90x120-ft. addition to foundry to FRANK DYKE.

Mich., Saginaw—Kelton Aurand Co. awarded contract to LOUIS MUELLER, JR., for 60x190-ft. factory.

Ill., Chicago—Diamond Glue Co. awarded contract to R. STANDING for two-story factory at 1726 Heald Ave. Estimated cost, $10,000. Noted Oct. 21.

Ill., Chicago—Contract awarded to ANDERSON STRANDBERG CO., for two-story warehouse at 1230 Carondolet Ave. for General Chemical Co. Estimated cost, $10,000. Noted Nov. 25.

Ill., Chicago—International Harvester Co. awarded contract to W. McRAE for one-story warehouse at 2600 Marshall Blvd. Estimated cost, $17,500.

Ill., Chicago—Link Belt Co., 367 West 39th St., awarded contract to E. W. SPROUL CO. for two-story foundry. Estimated cost, $30,000.

Ill., East St. Louis—Plymouth Cordage Co., Plymouth, Mass., awarded contract to FOX CONSTRUCTION CO., Boston, Mass., for four-story, 102x140-ft. plant at 22d and Market St. Estimated cost, $100,000.

Wis., Milwaukee—Advance Engineering Co. awarded contract for one-story, 120x220-ft. factory and machine shop at North Ave. and 30th St. to C. M. WINNEMANN, concrete and cement, and to MILWAUKEE STRUCTURAL STEEL CO., steel. Noted Nov. 25.

Wis., Milwaukee—Contract awarded to FOSTER CONSTRUCTION CO., Milwaukee, for garage and commercial building for Federal Realty Co. Estimated cost, $30,000.

Iowa, Waterloo—(Official)—Contract for four-story, 116x120-ft. brick garage for Waterloo Overland Co. awarded to H. A. MAINE CO., Waterloo, at $86,000. Noted Oct. 14.

Neb., Omaha—General contract awarded to ROBERT BUTKE, Paxton Bldg., Omaha, for three-story, 40x120-ft. dye works for Dresher Bros. Estimated cost, $20,000.

Tex., Houston—Contract for two-story, 70x125-ft. garage awarded to W. B. ZINKY.

Tex., Orange—Orange Rice Mill Co. awarded contract to T. HOWELL, Orange, for 100x200-ft. warehouse.

Colo., Denver—Armour & Co. awarded contract for packing plant at Denver Union Stock Yards to STOCKER & FRASER Estimated cost, $200,000.

Colo., Denver—Colorado Packing and Provision Co. awarded contract to STOCKER & FRASER, Chamber of Commerce Bldg., Denver, for six-story packing plant. Noted Nov. 25.

Calif., Los Angeles—Harbor Commission awarded contract for six-story warehouse on Municipal Pier No. 1 to MERCHANTS REALTY AND INVESTMENT Co., Los Angeles, at $117,000.

Que., Sherbrooke—Canadian Ingersoll-Rand Co. awarded contract to ANGLINS LIMITED, Montreal, for machine shop. Estimated cost, $50,000. Noted Nov. 18.

Ont., Cobourg—Contract for garage on South King St., for Soarling & Reeson awarded to JEX, MARTIN & CO., Division St. Estimated cost, $11,000.

FEDERAL GOVERNMENT WORK

Proposed Work

Penn., Titusville—Post Office—Bids will be received by James A. Wetmore, Act. Superv. Arch., Terasury Dept., Washington, D. C., until 3 p.m., Jan. 10, for U. S. post office at Titusville.

Md. Ft. McHenry—(Baltimore post office)—Memorial—Competitive plans will be received until Apr. 1 by Col. W. W. Hart, War Dept., U. S. Government, 1729 New York Ave. N. W., Washington, D. C., for building Francis Scott Key Memorial at Ft. McHenry. Estimated cost, $75,000.

D. C., Washington—Elevators—Bids will be received by James A. Wetmore, Act. Superv. Arch., Treasury Dept., until 3 p.m., Dec. 23, for installing electric passenger elevator in each of following buildings: U. S. post office and courthouse at Pendleton, Ore., Brattleboro, Vt., and Ardmore, Okla.

Mont., Missoula—Post Office—Bids will be received by James A. Wetmore, Act. Superv. Arch., Treasury Dept., Washington, D. C., until 3 p.m., Dec. 29, for U. S. post office at Missoula.

Wash., Vancouver—Press reports state that U. S. post office will be built at Vancouver. Estimated cost, $75,000.

Panama—Miscellaneous Supplies—Bids will be received by Major F. C. Boggs, Gen. Pur. Officer, Panama Canal, Washington, D. C., until 10:30 a.m., Dec. 8, for furnishing miscellaneous supplies.

Panama—Miscellaneous Supplies—Bids will be received by Major F. C. Boggs, Gen. Pur. Officer, Panama Canal, Washington, D. C., until 10:30 a.m., Dec. 15, for furnishing miscellaneous supplies.

Panama—Miscellaneous and Metal Supplies—Bids will be received by Major F. C. Boggs, Gen. Pur. Officer, Panama Canal, Washington, D. C., until 10:30 a.m., Dec. 13, for furnishing miscellaneous and metal supplies.

Bids In and Contracts Awarded

Mass., Boston—Elevator Plant—Contract for elevator plant in U. S. appraiser's stores awarded to OTIS ELEVATOR CO., Washington, D. C. Noted Sept. 23 and Oct. 21.

N. Y., Salamanca—Post Office—Contract for U. S. post office at Salamanca awarded to DUROLITHIC CO., Buffalo, at $55,550. Noted Oct. 7 and Nov. 25.

N. Y., Tompkinsville—Buoys—Contract for six type G Pintsch gas buoys awarded to SAFETY CAR HEATING AND LIGHTING CO., 2 Rector St., New York, at $10,800.

Penn., East Pittsburgh—Post Office—Contract for U. S. post office at East Pittsburgh awarded to TORBETT CONSTRUCTION CO., Hampton, Va., at $49,021. Noted Sept. 30 and Nov. 18.

Penn., Philadelphia—Dredging—American Dredging Co., Philadelphia, at $0.089 per cu.yd. submitted lowest bid for dredging Section "F" in Delaware River on Bellevue, Cherry Island and Deep Water Point lighthouse ranges and Home Dredging Co., Mobile, Ala., at $0.08875, for Sections "H" and "J." Noted Nov. 4.

Penn., Reading—Post Office—Contract for U. S. post office at Reading awarded to JOHN LOWRY, 8 West 40th St., New York, N. Y., at $90,880.

Md., Indian Head—Extension to Pulping and Poaching House—Bids were received Nov. 27 for extension to pulping and poaching house, Indian Head, from John H. Nolan Construction Co., Washington, D. C., at $6,977, and P. L. Robinson Construction Co., Baltimore, Md., at $8,497. Noted Nov. 11.

D. C., Washington—Building—Contract for truck house on New Jersey Ave. awarded to SKINKER & GARRETT, Washington, at $33,929. Noted Nov. 4.

D. C., Washington—Sewer Work—Bids were received Nov. 29 at Office of Commissioners of District of Columbia for sewer work as follows: Section 2, Kenilworth service sewer, (a) 12,200 cu.yd. ordinary excavation, (b) 150 cu.yd. sewer brick masonry, (c) 1,000-lin.ft. 18-in. diameter pipe sewer, (d) 900 lin.ft. 15-in. pipe sewer, (e) 7,200 lin.ft. 12-in. pipe sewer, (f) 2,400 lin.ft. 10-in. pipe sewer: Harper & Voigt, (a) 50c., (b) $14, (c) 78c., (d) 69c., (e) 60c., (f) 51c.; C. H. Tompkins. (a) 67c., (b) $13.75, (c) 66c., (d) 62c., (e) 60c., (f) 41c.; Warren F. Brenizer Co., (a) 85c., (b) $12, (c) 80c., (d) 70c., (e) 60c., (f) 50c.; storm and service mains, Petworth trunk sewer, (a) 1,900 cu.yd. ordinary excavation, (b) 100 cu.yd. concrete masonry, (c) 16 cu.yd. vitrified brick masonry, (d) 15 cu.yd. sewer brick masonry, ((e) 480 lin.ft. 24-in. pipe sewer: C. H. Tompkins, (a) 70c., (b) $7, (c) $21, (d) $14, (e) 90c.; Warren F. Brenizer Co., (a) 80c., (b) $7, (c) $21, (d) $14, (e) $1.10; George Hyman, (a) $1.25, (b) $7, (c) $20, (d) $15, (e) $1. Noted Nov. 25.

Va., Norfolk—Dredging—Bids were received Nov. 27 for dredging at navy yard, Norfolk, as follows: Bay State Dredging and Contracting Co., Boston, Mass., 13.7c. per cu.yd.; Coastwise Dredging Co., Norfolk, Va., 14c. per cu.yd.; Morris & Cummings, New York, N. Y., 14.89c. per cu.yd. Noted Nov. 4.

Ohio, Cleveland—Dredging—Bids were received Nov. 26 for dredging in Cleveland Harbor from Great Lakes Dredge and Dock Co., Williamson Bldg., Cleveland, $60,000; Duluth-Superior Dredging Co., Duluth, Minn., $80,000; Duluth-Marine Construction Co., Duluth, Minn., $88,000. Noted Nov. 4.

Ohio, Van Wert—Post Office—Contract for U. S. post office at Van Wert awarded to CHARLES W. GINDELE CO., Chicago, Ill., at $56,250. Noted Oct. 7 and Nov. 18.

Mich., Muskegon—Post Office and Custom House—Bids were received Nov. 29 for U. S. post office and custom house at Muskegon as follows: Maybel & Freuchtel, Gadsten, Ala., $63,666; R. P. Farnsworth & Co., New Albany, Ind., $69,500; George W. Stiles Construction Co., Chicago, Ill., $71,818. Noted Oct. 28.

Tex., Brenham—Post Office—Bids were received Nov. 27 for U. S. post office at Brenham as follows: W. G. Carter, Chicago, Ill., $44,834; George W. Stiles Construction Co., Chicago, Ill., $45,200; Algernon Blair, Montgomery, Ala., $46,285. Noted Oct. 21.

Tex., Navasota—Post Office—Bids were received Nov. 26 for U. S. post office at Navasota, (a) limestone, (b) sandstone, as follows: (a) Algernon Blair, Montgomery, Ala., $41,836; W. D. Lovell, Minneapolis, Minn., $42,000; George W. Stiles Construction Co., Chicago, Ill., $42,200; (b) Volney E. Taylor, Marlin, $53,000. Noted Oct. 21.

Tex., New Braunfels—Post Office—Contract for U. S. post office at New Braunfels awarded to WESTON & KROEGER, San Antonio, at $40,949. Noted Sept. 30 and Nov. 18.

CANALS—DITCHES—IRRIGATION

Proposed Work

N. Y., La Salle—Turning Basin—Bids will soon be received for turning basin, 50 ft. wide, at Wheatfield town line in Cayuga Creek.

N. Y., New York—(Borough of Brooklyn)—(Official)—Dredging—Bids will be received by R. A. C. Smith, Comr. of Docks, Pier "A," Battery Pl., North River, Manhattan, until 10 a.m., Dec. 6, for dredging in slip at foot of 28th St.

Fla., New Smyrna—Drainage—Lake Ashby Drainage District plans to drain about 42,000 acres. Estimated cost, $250,000. Isham Randolph & Co., Chicago, Ill., Engr. B. H. Wilson, Secy. of Drainage Dist.

Fla., Orlando—Drainage—J. Edson Andrews, Secy. and Treas. of Orlando Securities Co., Orlando, is interested in formation of drainage district to build about 60 miles of ditches and canals. Estimated cost between $130,000 and $175,000.

Ohio, Greenville—Ditch—Bonds for $38,400 for ditches and road work have been sold.

Ind., Hartford City—Ditch—Bids will be received until 2 p.m., Dec. 21, by Drainage Commissioner, I. O. O. F. Bldg., for construction of O. H. Hiatt Ditch in Washington, Jackson and Licking Townships, Blackford County.

Mich, Caro—Drainage—Sanilac, Lapeer and Tuscola Counties will build 40-mile drain. Estimated cost, $250,000.

Mich., Macon — Drainage — Commissioners of Lenawee, Washtenaw and Monroe Counties contemplate building middle branch of Macon Drain. Estimated cost between $40,000 and $50,000.

Mich., Mason—Drainage—Alaiedon and Vevay Townships will drain Alaiedon swamp, 12 miles.

Iowa, Des Moines—Ditch—Bids will be received until Dec. 6 by County Board of Supervisors for Drainage Ditch No. 16, Webster Township, and a bulkhead. Estimated cost, $10,922.

Iowa, Des Moines—Ditch—Bids will be received until Dec. 6 by County Board of Supervisors for Drainage Ditch No. 17 in Lincoln and Crocker Townships and a bulkhead. Estimated cost, $26,100.

Iowa, Keosauqua—Drainage—Van Buren County contemplates straightening Fox River, includes approximately 500,950 yd. excavation. Estimated cost, $55,650.

Iowa, Ottumwa—Ditch—H. O. Wray will make surveys of Soap Creek Drainage Ditch. Noted Oct. 21.

Iowa, Wall Lake—(Official)—Drainage—Surveys made and plans prepared for straightening and deepening Boyer River and draining Goose Pond Swamp. Estimated cost, $81,000. Seth Dean, Glenwood, Iowa, Engr.

Minn., Anoka—Drainage—County contemplates draining Coon Creek, eight miles. Estimated cost, $45,000. W. L. Ridge Co., Suveyor.

Minn., Bemidji—Ditches—Bids will be received until Dec. 15 by J. L. George, County Audr., Beltrami County, and L. H. Slocum, Audr., Koochiching County, for constructing Judicial Ditch No. 36, about 127 miles long. Estimated cost, $212,195. Noted Nov. 11.

Minn., St. Cloud—Ditch—Contract will soon be awarded for Ditches Nos. 26 and 35. S. S. Chute, County Surveyor.

Minn., Windom—Ditch—Contract will be awarded about Dec. 13 for Judicial Ditch No. 24. Estimated cost, $22,803. P. G. Newfeld, Clk., District Court.

Mo., Bloomfield—Ditch—Bids will be received until 2 p.m., Dec. 6, for ditch for Drainage District No. 28. R. F. Jones, County Clk.

Tex., Anahuac—Irrigation Improvements—Trinity River Irrigation District voted $30,000 bonds for repairing bulkhead across Smith Bay. Noted Nov. 25.

Tex., Barstow—Irrigation Improvements—Bids will be received until Dec. 20 for building dams, reservoirs, headgates, sluice-gates and all other improvements for Ward County Irrigation District No. 1. G. W. Dyer, Pres.

Tex., Dallas—Reclamation—Kaufman County No. 1, Ellis County No. 1, Ellis County No. 2, Ellis County No. 3 and Dallas County No. 1 contemplate reclaiming about 50,000 acres of land. Estimated cost, $420,000. O. W. Fonley, District Engr.

Tex., Robstown—Drainage—Bids will be received until Dec. 6 by Neuces County Drainage District No. 2 for ditches.

Colo., Craig—Irrigation—Preliminary plans prepared for irrigation system for Elk River Irrigation Co. Estimated cost, $2,000,000. William P. Finley, Consult. Engr.

N. M., Raton—Irrigation—Trustees of Antelope Irrigation District contemplate enlarging storage capacity of district and extending ditches. Estimated cost, $325,000.

Idaho, Caldwell—Dam—Directors of Glen Lake Irrigation District contemplate building concrete dam on Boise River about five miles below Arrowrock Dam. W. W. Peters, Secy.

Idaho, Caldwell—Irrigation—Election will be held Dec. 14 in Caldwell Irrigation District to vote on $27,000 bonds for repairing and enlarging system.

Idaho, Nyssa—(Official)—Irrigation—Bids will be received about Jan. 10 for reclaiming approximately 8,000 acres near Nyssa for Nyssa-Arcadia Drainage District. G. McGee, Caldwell, Ch. Engr. Noted Oct. 21.

Utah, Ephraim—Irrigation—George A. Snow, Salt Lake City, Walter I. Moddy, Chicago, Ill., and C. A. Tusch, California, contemplate constructing irrigation project. Estimated cost, $500,000.

Ariz., Holbrook—Irrigation—Contract will soon be awarded for rebuilding Woodruff Dam and repairing irrigation works. Q. R. Gardner, County Superv.

Ariz., Tempe—Ditches—Bids will be received until Dec. 14 by J. W. Miller, Chn., Bd. of Directors, District No. 1, Maricopa County, for constructing 8.4 miles main open drain ditch.

Wash., Kennewick—Irrigation—Commercial Club interested in development of Benton County land through extension of Sunnyside Irrigation Canal to Hover, 12 miles, to irrigate about 40,000 acres.

Ore., Salem—Dam—State Engineering Department approved application of Dobbins Ditch Co., Joseph, to build dam on outlet of Wallowa Lake.

Ore., Silver Lake—Irrigation—Silver Lake Water Users' Association will form irrigation district to irrigate 46,000 acres of land. United States Reclamation Service estimates cost at $28.10 per acre.

Calif., San Joaquin—Reservoir—Bids will be received until Dec. 6 for Woodward Reservoir. Estimated cost, $174,000. A. Geiffen, Monteca, Engr. C. A. Proudfit, Monteca, Secy., South San Joaquin Irrigation District. Noted Nov. 18.

Bids In and Contracts Awarded

Mass, Boston—Dredging—One bid received Nov. 24 by Directors of Port of Boston, 40 Central St., for dredging and filling East Boston Flats, Contract No. 46, about 1,500,000 cu.yd., from H. P. Converse & Co., 88 Broad St., Boston, at $371,250. Noted Nov. 18.

N. Y., New York—(Borough of Manhattan)—(Official)—Dredging—P. Sanford Ross, Inc., 135 Bay St., Clifton, S. I., at $0.30 per cu.yd., submitted only bid Nov. 23 for dredging in North River from 103rd to 109th St., approximately 33,000 cu.yd.

N. Y., New York—(Borough of Manhattan)—(Official)—Dredging—Bids were received Nov. 23 by Department of Docks and Ferries for dredging at foot of East 90th St., East River, 17,000 cu.yd., from Morris & Cummings Dredging Co., 17 State St., New York, $0.33 per cu.yd.; P. Sanford Ross, Inc., $0.70 per cu.yd.; R. C. Packard & Co., $0.80 per cu.yd.

Penn., Port Richmond—(Philadelphia post office)—Dredging—Contract awarded to BOWERS SOUTHERN DREDGING CO., Galveston, Tex., for deepening ship channel in Delaware River. Estimated cost, $75,000.

Fla., Tallahassee—Locks and Dams—Contract for three locks and dams in Everglades Drainage District awarded to SAVANNAH ENGINEERING AND CONSTRUCTION CO., Savannah, Ga., at $120,000. Noted Aug. 12.

Iowa, Jefferson—Drainage—Contract for furnishing tile for drainage work in Districts Nos. 10 and 33 awarded to MACOMB SEWER PIPE CO., Macomb, Ill., at $10,622.

Minn., Alexandria—Ditch—Contract for Ditch No. 17 awarded to CARL CHRISTENSON, Litchfield, at $17,589.

Minn., Blue Earth—Ditches—County Commissioners awarded contracts for construction of ditches to HAWKEYE CONSTRUCTION CO., Webster City, Iowa, $7,943, Ditch No. 29; O. C. OLESON, Blue Earth, $7,195, Ditch No. 40. Jesse L. Harring, County Audr.

Minn., New Ulm—Ditches—Contract for tile and open ditches awarded to CHRISTOPHER NIELSEN, Sunborn, at $12,345.

Minn., Windom—Ditch—Contract for Judicial Ditch No. 20 awarded to REDDING & SMAGE, Windom, at $23,700. Noted Nov. 18.

Minn., Windom—Ditch—County Commissioners awarded contract for Ditch No. 21 to HANS TRUFESEN, Live Creek, at $13,989. Noted Nov. 18.

Ark., Blytheville—Drainage—Contract for Drainage Ditch No. 16 awarded to CLYDE WALDE, National Bank Bldg., La Grande, Ind., at $6.39 per cu.yd. Estimated cost, $425,000.

Ark., Knobel—Ditch—Contract for 52.75 miles of ditches and 4.25 miles of levees awarded to NORTHERN CONSTRUCTION CO., Elkhart, Ind., at $116,300. Noted Nov. 25.

Colo., Trinidad—Ditch—Contract for ditch awarded to J. A. LAUGHLIN. Estimated cost, $15,000.

Idaho, Boise—Irrigation—Contract awarded to WICKAHONEY LAND AND WATER CO. for irrigation of 30,000 acres for Bruneau Irrigation Project in Owyhee County. Estimated cost, $50 per acre. Noted Oct. 28.

Ore., Baker—Ditch—Contract awarded to MACY BROS., Sparta, for constructing ditch to connect Hogen Ditch with Eagle Creek three miles.

Ore., Hood River—(Official)—Irrigation—Board of Directors of East Fork Irrigation District Nos. 5 and 6 awarded contract to CENTRAL TIMBER AND CONTRACTING CO., Carlton, for diversion gates, dam and intake works and for enlarging canals. Noted Nov. 11.

Calif., Modesto—Irrigation—George J. Ulrich at $19,340 submitted lowest bid for nine concrete drops for Modesto Irrigation District.

T. H., Honolulu—Irrigation—Lord-Young Engineering Co., Honolulu, at $109,600 submitted lowest bid for Waiolama fill for Waiolama Reclamation and Sanitation Project at Hilo.

MISCELLANEOUS

Proposed Work

Conn., Windsor—Elimination of Grade Crossing — Plans submitted to Highway Commissioner, Hartford, for elimination of grade crossing in Windsor. Estimated cost, $90,000.

N. Y., Albany—Fire Alarm Station—Bids will be received until Dec. 6 by Board of Contract and Supply for building fire alarm station at Delaware and Myrtle Ave.

N. Y., Ithaca—Elimination of Grade Crossings — Surveys completed for street junctions and railroad gradings preparatory to elimination of grade crossing on Delaware, Lackawanna & Western R.R. in South Aurora St., South Hill, Ithaca. Estimated cost, $40,000.

N. Y., New York—(Borough of Brooklyn)—(Official)—Tank—Bids will be received by L. H. Pounds, Borough Pres., Room 2, Borough Hall, until 11 a.m., Dec. 9, for furnishing labor and materials for construction of steel tank and fittings, having a capacity of 52,800 gals., to be used for storage of liquid asphalt, at municipal asphalt plant, 7th St. basin, Gowanus Canal.

N. Y., Olean—Flood Protection—Plans approved by W. W. Wotherspoon, State Supt. of Pub. Wks., for deepening and straightening Olean Creek from junction with Alleghany River to point 2½ miles up stream and building dikes and retaining walls on bank of creek. Estimated cost, $150,000. E. W. Fitzgerald, Olean, Pres. of Flood Abatement Comn. Noted Nov. 18.

N. Y., Rochester—Bathhouse and Bandstand—Plans prepared for bathhouse and bandstand at Durand-Eastman Park. Estimated cost, $12,000.

N. J., Ventnor—(Atlantic City post office)—Jetties—City Council authorized bond issue of $10,000 for jetties from Cambridge to Portland Ave.

Penn., Erie—Flood Protection—City Council adopted plan recommended by Farley Gannett, Telegraph Bldg., Harrisburg, for flood protection in Milk Creek. Plan adopted calls for reinforced-concrete conduit about 12,500 ft. long, 22 ft. wide, 18 ft. high with inside diameter capacity of 12,000 cu.ft. per second. Estimated cost, $900,000. Noted Oct. 21.

Va., Richmond—Creek Improvements—Charles E. Bolling, City Engr., estimated cost of straightening sewers and cover in Shockee Creek from river to Seventh and Hospital St. at $1,035,000.

Fla., Miami—Harbor Channel and Piers—Bids will be received until Dec. 20 for harbor channel and piers, Miami. Isham Randolph & Co., Chicago, Ill., Engr. Noted July 8 and Sept. 16.

Miss., Meridian—Subway—City officials and representatives of interested railroads estimate cost of 26th St. subway at $100,000.

La., Lake Charles—Retaining Wall—City will build retaining wall from Gill to Foster St., and construct boulevard and city park. Estimated cost, $100,000.

Tenn., Chattanooga—Wharf—City sold $100,000 bonds to improve wharf. R. Hooke, City Engr. Noted Oct. 14.

Tenn., Memphis—River Improvements — Mississippi River Commissioners plan to direct flow of Wolf and Loosahatchie Rivers to keep harbor clear of sand bars.

Ohio, Akron—Subway—Firestone Tire and Rubber Co. secured permission to build subway under South Main St. from factory to new club house and restaurant.

Ohio, Columbus—Elimination of Grade Crossing — Plans prepared by engineers of Pennsylvania R.R. and four other railroad companies for elimination of grade crossing in North Side of Columbus. Estimated cost, $600,000. City will pay $200,000 of cost.

Ohio, Sandusky—Coal Dock—Cleveland, Cincinnati, Chicago & St. Louis Railway contemplates building coal docks and car dumping machine. George P. Smith, Cincinnati, Consult. Engr.

Ohio, Upper Sandusky—Creek Improvement—County Commissioners contemplate widening and straightening Tymochett Creek. Estimated cost, $125,000.

Ill., Chicago—Engine House—City will build two-story brick engine house at 5318 Western Ave. Estimated cost, $19,000. C. Kallah, Arch.

Iowa, Jefferson—Subway—Chicago & Northwestern Railway will build subway under tracks. Estimated cost, $25,000. W. H. Finley, Chicago, Ill., Ch. Engr.

Minn., St. Paul—Steel Stairway—Bids will be received until 10:30 a.m., Dec. 6, by August Hohenstein, Pur. Agt., for steel stairway on Hall Ave. between South Wabasha St. and Prospect Terrace.

Wyo., Cheyenne—Pipe Line—According to press reports Governor Kendrick appointed committee to confer with committee of Nebraskans on proposition to build oil pipe line from Wyoming into and across state of Nebraska. Cost limited to $5,000 mile.

Tex., Beaumont—Machinery and Pier—All bids received Nov. 15 by J. G. Sutton, Secy. Wharf and Dock Commission, for quay walls, trans-shipment shed, and freight machinery rejected. New bids will be received. Noted Nov. 4.

Tex., Ft. Worth—Levee—Election will soon be held to vote on $75,000 bonds for levees. A. A. Stiles, State Reclamation Agt.

Tex., Galveston—Bulkhead—A. T. Dickey, City Engr., estimates cost of raising protective grade back of seawall, 21 ft. from Sixth to 19th St. with bulkhead at $109,280, without bulkhead at $91,280.

Ore., Astoria—Mausoleum—Portland Mausoleum Co., Portland, contemplates building Mausoleum at Astoria. Estimated cost, $40,000.

Ore., Riverview — Mausoleum — Plans being prepared by Lawrence & Holford, Arch., for mausoleum for Portland Mausoleum Co., Portland. Estimated cost, $65,000.

Calif., Oakland—Mausoleum—Pacific Mausoleum Co. plans to build a mausoleum in Contra Costa County. Estimated cost, $300,000.

Que., St. Lambert—Race Track—Bids will soon be received by T. C. Kirby, 128 Bleury St., Montreal, for grading, ballasting, fencing, building double deck grand stand, single stage bleacher and club house required in construction of automobile race track for Canadian Speedway Co., Ltd.

Bids In and Contracts Awarded

Mass., Boston—Bulkhead—Bids were received Nov. 24 by Directors of Port of Boston for bulkhead and 170,000 cu.yd. dredging and placing filling beneath and around bulkhead, Contract No. 47, from Bay State Dredging Co., 247 Atlantic Ave., Boston, $82,830; Coleman Bros., Pearl St., Chelsea, $95,-500; H. P. Converse & Co., 88 Broad St., Boston, $123,218. Noted Nov. 18.

Mass., Boston—(Roxbury)—Engine House—Lowest bids received by city Nov. 22 for alteration to Engine House No. 14 on Center St., Roxbury, were as follows: D. R. McKillop, 127 West Brookline St., $12,792; McDonald & Son, 98 Granite St., $12,943; McNeil Construction Co., 201 Devonshire, St., $13,187.

Mass., Boston—(Roxbury)—Ladder House—Bids received Nov. 22 by city for alteration to Ladder House No. 14 on Dudley St., Roxbury, from D. R. McKillon, 127 West Brookline St., $13,333; McDonald & Son, 98 Granite St., South Boston, $13,735; M. D. Mealy Co., Brookline, $13,945.

R. I., Providence—Arena—Contract awarded to JOHN F. MACLAREN, Providence, for two-story, 100x120-ft. arena for Marieville Association. Estimated cost, $25,000.

N. Y., New York—(Borough of Bronx)—(Official)—Track Installation—Bids were received Nov. 23 by Public Service Commission of First District, 154 Nassau St., for track installation on White Plains Rd. and extension of existing subway from Coast & Lake Contracting Corporation, 41 Broad St., New York, $53,930; Southeastern Construction and Engineering Corporation, $101,205; T. H. Reynolds Contracting Co., $102,126. Noted Nov. 18.

N. Y., New York—(Borough of Brooklyn)—Dry Dock—Contract for floating dry dock at foot of 58th St. awarded to MORSE DRY DOCK AND REPAIR CO.

Md., Baltimore—(Official)—Coal Pier—Baltimore & Ohio R.R. awarded contracts for coal pier at Curtis Bay, Baltimore, to H. S. KERBAUGH, INC., Baltimore, dredging, bulkhead and superstructure; ROBINS CONVEYING AND BELT CO., New York, N. Y., conveying machinery; SMITH-McCORMICK, Easton, Penn., grading. Estimated cost, $1,500,000. F. L. Stuart, Ch. Engr. Noted Sept. 30.

La., New Orleans—Revetment—Contracts awarded to W. J. COMERFORD, New Orleans, for wooden revetment and restoring wave wash from Kentucky to Angelina St., P. C. POWERS & SONS, McComb, Miss., for reinforced-concrete revetment and toe-wall from Bartholomew to Lesseps St.

La., New Orleans—Wharf—Doullut & Williams, New Orleans, at $154,000, submitted lowest bid for piling, timber, etc., for wharf of grain elevator, wharf to be 1,350 ft. long and 12 ft. wide.

Ky., Hawesville—Creek Improvements—Contract for widening and straightening Panther Creek in Hancock and Ohio Counties awarded to W. E. EWAN, at $10,000.

Ohio, Portsmouth—Flood Protection Wall—Contract for second section of flood protection wall awarded to GLANDORF & BROWNING, Cincinnati, at $67,779. Noted Nov. 25.

Ind., Gary—Ore Dock—Contract for ore dock for U. S. Steel Co. awarded to ILLINOIS IMPROVEMENT AND BALLAST CO.

Neb., Omaha—(Official)—Crane—Contract for railroad crane of five tons capacity awarded to LINK BELT CO., Chicago, Ill. Noted Nov. 11.

Tex., Beaumont—Wharf—City Council awarded contract to JOHN O. KELLY, San Antonio, at $65,000, for 500-ft. wharf to be known as Unit No. 2. Noted Oct. 21.

Tex., Galveston—Bathhouse—Contract for bathhouse for Murdoch Bathhouse Co. awarded to J. W. ZEMPTER, Galveston. Estimated cost, $18,000.

N. M., Gallup—River Improvements—Santa Fé R. R. awarded contract to SHARP & GALLUP, Topeka, Kan., for initial work at Gallup to change course of Puerco River. Site when filled in will be used for shops, roundhouses and tracks. Estimated cost, $67,000.

BUILDINGS

Other items relative to Building Construction will be found under the following headings: "Industrial Works;" "Federal Government Work" and "Miscellaneous."

Proposed Work

Maine, Camden—Preliminary plans being prepared by W. E. Schwartz, Arch., Camden, for hotel. Estimated cost, $40,000.

N. H., Dixville—Preliminary plans being prepared for hotel for Dixville Notch Corporation. Estimated cost, $200,000. C. R. Whitchner, The Beacon, Manchester, Arch.

Mass., Boston—(Dorchester)—Bids will be received by Schoolhouse Committee, City Hall Annex, until Dec. 11, for Sarah Greenwood Elementary School, Dorchester. Estimated cost, $140,000. Funk & Wilcox, 120 Boylston St., Boston, Arch.

Mass., Bourne—Plans being prepared for railroad station for New York, New Haven & Hartford R.R. E. Gagel, New Haven, Ch. Engr.

Mass., Everett—Plans being prepared by Charles R. Greco, 8 Beacon St., Boston, for one-story church for St. Joseph's Church Society. Estimated cost, $50,000.

Mass., Lynn—Press reports state that school will be constructed on Conomo Ave. Estimated cost, $100,000.

Mass., Newton—Tentative plans prepared by Haven & Hoyt, Arch., for club house for Commonwealth Country Club. Estimated cost, $50,000.

Mass., Springfield—All bids received for Hampden County training school rejected as being too high. Plans will be revised and new bids asked.

Mass., Stoneham—Plans being prepared by Penn Varney, 27 Exchange St., Lynn, for fire and police station. Estimated cost, $40,000.

Mass., Worcester—J. W. Critchley, 663 Southbridge St. has purchased a site at Main and Walnut St. on which he will build a 10-story office building.

R. I., Pawtucket—George W. and Ella Shaw will build a three-story business block at Hillside and Pawtucket Ave.

Conn., Bridgeport—Plans being prepared by F. A. Cooper, Arch., for an addition to the Garfield School. Estimated cost, $45,000.

N. Y., New York—(Borough of Manhattan)—(Official)—Plans prepared by Gronenberg & Leuchtag, Arch., 303 Fifth Ave., for one-story, 151.3x130.5-ft. brick store and theater building at Fordham Rd. and Grand Concourse for Fordham Road Corporation. Estimated cost, $75,000.

N. Y., Pelham—Board of Education contemplates building additions to three schools. Estimated cost, $50,000. Louis W. Francis, Pres., Bd. of Education.

N. Y., Potsdam—Contract will soon be awarded for two-story normal school for New York State Department of Education. Estimated cost, $300,000. Noted Oct. 14 and 21.

N. Y., Rochester—George Simpson, Regent Theater, East Ave., interested in organization of company for purpose of building theater and store building. Estimated cost, $1,000,000. Leon Lempert & Son, 149 Culter Bldg., Arch.

N. J., Bayonne—Plans being prepared for addition to high school, and School No. 3 and for building new School No. 5. Estimated cost, $482,000. Fagan & Briscoe, 95 River St., Hoboken, Arch.

N. J., Freehold—Council plans to build new city hall and fire house.

N. J., Hoboken—Board of Education plans to build three new school buildings to replace Schools Nos. 2, 3 and 4. James Laverty, Pres., Bd. of Education.

N. J., Princeton—Plans being prepared by Coolidge & Carlson, 89 State St., Boston, Mass., Arch., for medical research buildings for Rockefeller Institution. Estimated cost, $300,-000.

Penn., Allentown—Y. M. C. A. will construct six-story addition. Estimated cost, $100,000. Louis E. Jallade, New York, N. Y., and Ruhe & Lange, Allentown, Archs.

Penn., Eddystone—Plans being prepared by Henon & Boyle, Arch., Philadelphia, for seven-story hotel for Remington Arms Co. Estimated cost, $175,000.

Penn., Philadelphia—Plans being prepared by Robeson Lea Perot, Arch., 34 South 17th St., Philadelphia, for 12-story reinforced-concrete office building. Estimated cost, $250,000.

Penn., Philadelphia—Mount Carmel Methodist Episcopal Congregation will build church at Broad St. and Northeast Blvd. Estimated cost, $75,000.

Penn., Pittsburgh—A 16-story mercantile and office building will be constructed at Seventh Ave. and Smithfield St. by G. T. Oliver, U. S. Senator.

Penn., Uniontown—Election will soon be held to vote on $250,000 bonds for schools.

Del., Wilmington—Plans being prepared by Edward Canby May, Arch., du Pont Bldg., for two bank buildings.

Md., Baltimore—Plans being prepared by Alfred C. Leach, Arch., for public school at Patterson Park. Estimated cost, $100,000.

Md., Baltimore—Baltimore Evangelistic Association will build a tabernacle at Greenmount Ave., Barclay, 28th and 29th St. D. Baker, 520 Equitable Bldg., interested.

D. C., Washington—Plans prepared for two-story, 150x173-ft. theater and office building for George T. Smallwood and I. Cassidy, 3520 16th St., N. W. Estimated cost, $100,000. R. W. Geare, Southern Bldg., Arch.

D. C., Washington—Preliminary plans prepared for theater for Rialto Building Co. Estimated cost, $150,000. Thomas W. Lamb, 644 Eighth Ave., New York, N. Y., Arch.

Va., Norfolk—A four-story building will be constructed on Kin St. for St. Paul's Female Academy.

Va., Roanoke—L. E. Johnson, Pres. of Norfolk & Western R.R., and associates will enlarge Hotel Roanoke. Estimated cost, $200,000.

S. C., Greenwood—Main Street Methodist Church will erect building. Estimated cost between $40,000 and $50,000. A. C. Stockman, C. C. Featherstone and George Hart, interested.

Fla., Clearwater—Election will probably be held in December by citizens of Pinellas County to vote on $150,000 bonds for courthouse and jail. Noted Oct. 28.

Fla., Jacksonville—National Motion Picture Co. contemplates building motion-picture theater. Estimated cost, $300,000.

Ala., Birmingham—Plans prepared by William Leslie Welton, Arch., Jefferson County Bank Bldg., for two additions to Birmingham Infirmary in West End. Estimated cost, $100,000.

Ala., Montgomery—Women's College plans to build dormitory in spring. Estimated cost, $50,000. W. M. Swartz interested.

Miss., Pontotoc—Bids will be received about Dec. 6 for court house for Pontotoc County. Estimated cost, $75,000. Noted Oct. 28.

Miss., Yazoo City—Bonds for $45,000 will be issued for high school.

La., Alexandria—Three-story building will be constructed by Knights of Columbus, Alexandria Council No. 1134.

La., Shreveport—Construction of building estimated to cost $50,000 contemplated by Shreveport Fair Association.

Tenn., Bristol—Citizens voted $60,000 bonds for high school. Noted Oct. 28.

Tenn., Cookeville—State Board of Education, Nashville, plans to construct two buildings at State Normal and Polytechnic School. Estimated cost, $145,000.

Tenn., Nashville—Bids will soon be received by Board of Education for Elliott Street School and negro high school. Estimated cost, $70,000 and $55,000 respectively. Noted Oct. 7.

Tenn., Nashville—Bids will be received until Dec. 4 by Asmus & Norton, Arch., for dormitories and administration buildings for State Polytechnic School. Estimated cost, $125,000.

Ky., Danville—Bids will be received about Jan. 1 by W. S. Van Dalsem, Arch., Masonic Bldg., for five-story, 78x100-ft. hotel for Danville Hotel Co. Estimated cost, $60,000.

Ky., Lexington—Plans prepared for two-story, 30x40-ft. Sunday school for Porter Memorial Church. Estimated cost, $40,000. Frank L. Smith, 29 Lexington Bank and Trust Bldg., Arch. Bids for same will be received in spring.

Ky., Lexington—Board of Education plans to build two-story school. Estimated cost, $50,000. C. T. Melcher, Pres. Bd. of Education.

Ohio, Akron—Bids will soon be received by the Board of Education for two-story Jennings School. Estimated cost, $100,000. T. R. Ridley, Arch., Cottage Pl., Akron.

Ohio, Akron—Summit County contemplates building county infirmary. Estimated cost, $250,000. C. L. Bower, Clk. Bd. of County Comr.

Ohio, Akron—Bids will be received by J. F. Barnheart, Clk. of Bd. of Education, until noon, Dec. 13, for Bowen School. Harpster & Bliss, Nantucket Bldg., Arch.

Ohio, Alliance—Chamber of Commerce is interested in a project to build a new union station.

Ohio, Cincinnati—A theological seminary will be constructed on Norwood Heights by Archdiocese of Cincinnati. Estimated cost, $300,000.

Ohio, Cincinnati—Bids will be received by C. W. Handman, Bus. Mgr., Bd. of Education, until noon, Dec. 20, for Industrial Arts Building, tunnel K and power house, stadium, gymnasium and tunnel J, of Eastside High School.

Ohio, Cincinnati—Plans will be prepared by Garber & Woodward, Arch., for new public school. Estimated cost, $60,000.

Ohio, Cleveland—Plans being prepared by E. E. Hart, Ch. Engr., for two-story, 100x800-ft. railroad terminal and steel trestle, 600-ft. long on Clay Court and East Ninth St. for New York, Chicago & St. Louis R.R. Estimated cost, $400,000.

Ohio, Cleveland—Cleveland Public Library Board will build library building. Estimated cost, $2,000,000.

Ohio, Cleveland—Frank D. Skeel, Arch., 213 Vickers Bldg., Cleveland, will soon award contract for six-story hotel on East 61st St. for G. W. Crile. Noted Oct. 21.

Ohio, Columbus—Plans being prepared by Richards, McCarty & Bulford, Arch., for church at Auburn and Madison Ave., for Franklin Park M. E. Church. Estimated cost, $45,000.

Ohio, Defiance—Lodge No. 147, B. P. O. E. contemplates building two-story lodge building. Estimated cost, $60,000.

Ohio, East Cleveland—City contemplates two new fire stations. Estimated cost, $50,000.

Ohio, Findlay—Buckeye National Bank will remodel and improve its bank building. Estimated cost, $40,000.

Ohio, Lakewood—New York, Chicago & St. Louis R.R. contemplates building two-story passenger station. Estimated cost, $50,000. William H. Canniff and E. E. Hart, 412 Hickox Bldg., Ch. Engrs.

Ohio, Lebanon—Bids will be received by Bausmith & Drainie, Arch., Gerke Bldg., Cincinnati, until Dec. 20, for public memorial building.

Ohio, New Philadelphia—Bids will be received until noon, Dec. 14, for two-story, 60x85-ft. school for Goshen Township. Estimated cost, $45,000. J. W. Syron, 118 Court St., New Philadelphia, Clk. of Bd. of Education.

Ohio, Olmsted Falls—Plans being prepared by W. H. Nickolas, Arch., 1900 Euclid Ave., Cleveland, for high and grade school. Estimated cost, $50,000.

Ohio, Orient—Bids will be received until noon, Dec. 13, by John W. Lane, Clk., Bd. of Education, Rural School District, Scioto Township, for purchase of $45,000 bonds for school.

Ohio, Toledo—Plans being prepared by Thomas F. Huber, Arch., Toledo, for 10-story hotel on Summit St. for George P. Waldorf. Estimated cost, $125,000.

Ohio, Toledo—Central Ohio Paper Co., Columbus, plans to build three-story commercial building on Ontario St., Toledo. Estimated cost, $40,000.

Ohio, Wilmington—Plans prepared for three-story, 110x140-ft. courthouse and jail for Clinton County. Estimated cost, $300,000. H. Castl, County Audr.

Ind., Huntington—Plans being prepared by Elmer E. Dunlap, Arch., 909 State Life Bldg., Indianapolis, for two-story, 141x183-ft. high school for Board of Education. Bids will be received about Jan. 1.

Ind., Indianapolis—Pennsylvania R.R. plans to build freight station on Pennsylvania St. Estimated cost, $300,000.

Ind., Portland—Bids will soon be received for three-story, 90x160-ft. court house for Jay County. Estimated cost, $275,000. Noted Nov. 4.

Ind., Terre Haute—Plans will be prepared by H. W. Foltz, Arch., Indiana Pythian Bldg., Indianapolis, for proposed McLean School. Estimated cost, $115,000.

Mich., Flint—Citizens voted $100,000 bonds for schools.

Mich., Grand Rapids—Plans being prepared by Pierre Lindhout, Arch., 718 Ashton Bldg., for two-story, 88x110x141-ft. bank and store building and garage.

Mich., Kalamazoo—Contract will soon be awarded for Nurses' Home for Kalamazoo State Hospital. Estimated cost, $56,000. Wernette, Bradfield & Mead, 441 Houseman Bldg., Grand Rapids, Mich., Arch. Noted Oct. 28.

Ill., Champaign—Plans being prepared for two-story theater for a stock company represented by Thomas Wilson, 53 North Market St., Champaign. C. W. & George L. Rapp, Arch., 69 West Washington St., Chicago, Ill. Estimated cost, $100,000.

Ill., Chicago—Bids will be received by Ottenheimer, Stern & Reichert, Arch., 220 State St., until Dec. 10, for 12-story clubhouse for Chicago Lodge No. 4, B. P. O. E. Estimated cost, $350,000.

Ill., Chicago—A new hospital will be constructed at Highland Park. Estimated cost, $100,000.

Ill., Mattoon—Trustees of Memorial Hospital plan to construct new hospital.

Ill., Ottawa—Plans prepared by J. F. Richardson, Arch., for Illinois Valley general hospital. Estimated cost, $75,000. J. W. Pettit, interested.

Ill., Urbana—Plans being considered by Methodists of Illinois for several buildings at University of Illinois. Estimated cost, $500,000.

Wis., Eau Claire—Common Council considering construction of municipal auditorium. Estimated cost, $85,000.

Wis., Milwaukee—Preliminary plans being prepared by Van Ryn & DeGelleke, Arch., Caswell Block, for three-story, 85x120-ft. school of trades for girls for Milwaukee Board of School Directors. Estimated cost, $160,000.

Wis., Plymouth—Press reports state that Lutheran hospital will be constructed in Plymouth. Estimated cost, $40,000.

Wis., Superior—Allied Protestant Churches plan to build hospital. Estimated cost, $100,000.

Iowa, Carroll—Contract for three-story, 88x149-ft. school will be awarded some time in January by Board of Trustees of Independent School District. Bonds for $80,000 voted for this purpose. Noted Oct. 21.

Iowa, Centerville—Bids will be received until Dec. 15 for three-story hospital for Sisters of Mercy. Estimated cost, $45,000. F. E. Cox, Arch., 45 Baldwin Bldg., Council Bluffs.

Iowa, Davenport—Bids will be received by George D. Stanhuhar, Arch., 608 Best Bldg., Rock Island, Ill., until Dec. 15, for senior hall, dormitories and chapel for St. Ambrose College. Estimated cost, $75,000.

Minn., Minneapolis—Thorpe Bros. contemplates building at Eighth and Hennepin Ave. Estimated cost, $500,000.

Minn., Minneapolis—Plans being prepared by Kees & Colburn, Arch., for 12-story commercial and theater building at Hennepin and Seventh St. for Hennepin Holding Co. Estimated cost, $1,000,000. Hazen J. Burton, Pres.

Minn., Rochester—Plans being prepared by F. H. Ellerbe, Arch., 692 Endicott Bldg., St. Paul, for three hospital buildings.

Minn., St. Paul—New building contemplated by Home of the Friendless, 469 Collins St. Estimated cost, $75,000.

Minn., St. Paul—People's Bank of St. Paul plans to construct business building. Estimated cost, $150,000.

Minn., Virginia—Plans being prepared by Carl E. Nystrom, Arch., 502 Palladio Bldg., Duluth, for two-story high school. Estimated cost, $150,000. A. B. Holly, Clk. Bd. of Education.

Kan., Iola—Allen County State Bank will build a two-story building. Estimated cost, $50,000. T. H. Bowlus, Pres.

Kan., Pittsburgh—Plans being prepared by Crowell & Van Meter, Arch., Wichita, for three-story, 70x150-ft. hospital. Bids will be received about Jan. 1. Estimated cost, $100,000.

Kan., Wichita—Press reports state that Bell Telephone Co. will build a five-story office building at First and Market St.

Neb., David City—Citizens voted $60,000 bonds for high school. Noted Nov. 25.

Neb., Lincoln—Bids will be received until 4 p.m., Dec. 15, by J. S. Dales, Secy. Bd. of Regents of Nebraska University, for chemistry and hospital buildings.

Neb., Lincoln—Plans prepared for 10-story 85x142-ft. terminal building at 10th and O St. for Lincoln Traction Co.

Neb., Lincoln—Orpheum Building Co. plans to build new theater. Estimated cost, $75,000.

Neb., Omaha—Plans being prepared for hospital for University of Nebraska, College of Medicine. Estimated cost, $150,000. John Latenser & Sons, 626 Bee Bldg., Arch.

S. D., Webster—Election will be held in December to vote of $60,000 bonds for two-story high school for Board of Education. Holmes & Flinn, Arch., 8 Dearborn St., Chicago, Ill. Noted Nov. 25.

Mo., Jefferson City—Citizens of Cole County defeated $50,000 bonds for jail and tuberculosis hospital. Noted Aug. 12.

Mo., Joplin—Joplin School District voted to issue $350,000 bonds for high school. J. A. Becker, Pres. School Bd. Noted Nov. 18.

Mo., Kansas City—Plans being prepared by Madorie & Birdsall, Arch., 832 Reserve Bank Bldg., for four-story, 62x128-ft. dormitory for city. Estimated cost, $125,000.

Mo., Kansas City—Plans being prepared by F. H. Michaelis, Arch., 113 McGee St., for a 12-story office building at 912-14 Walnut St. for Richard W. Smith, 3120 Charlotte St. Estimated cost, $150,000.

Mo., Neosha—Bonds for $48,000 voted for high school.

Mo., Nevada—Citizens defeated $40,000 bonds for city hall.

Mo., St. Joseph—Bartlett Bros. Land and Loan Co. will build five-story building at Eighth and Felix St.

Mo., St. Louis—Missouri National Guard, Troop B, plans to build armory. Estimated cost, $350,000.

Mo., St. Louis—Y. M. C. A. plans to erect colored branch building. Estimated cost, $125,000.

Ark., Searcy—Company is being organized for the purpose of building hotel. Estimated cost, $40,000. C. E. Myrick, interested.

Tex., El Paso—Plans being prepared for seven-story store and office building at Mills and Stanton St. for William M. Banner and M. D. Roberts. Estimated cost, $200,000.

Tex., Gainesville—Bids will be received about Dec. 20 by Patrick Henry, Chn. of Bd. of Control, for four dormitories for Texas State Girls' Training School.

Okla., Tulsa—(Official)—We have been advised that George Winkler, Tulsa, and not Walter E. Gilham, Kansas City, Mo., is architect for high school, as stated in our issue of Oct. 21. Walter E. Gilham is Engr.

Colo., Colorado Springs—Atchison, Topeka & Santa Fé R.R. contemplates building depot and hotel. Estimated cost, $500,000.

Colo., Loveland—Plans being prepared by Roeschlaub & Fuller, Arch., 310 Foster Bldg., Denver, for high school. Estimated cost, $85,000. Noted Oct. 21 and Nov. 11.

Colo., Pueblo—Bids will be received until 10 a.m., Dec. 15, by Colorado State Board of Corrections for three buildings at Colorado Insane Asylum.

N. M., Santa Fé—Plans prepared for office building for Santa Fé Water and Light Co. Estimated cost, $100,000.

Idaho, Nampa—Election will soon be held to vote on $50,000 bonds for high school.

Wash., Seattle—Bids will soon be received by Thompson & Thompson, Arch., Mutual Life Bldg., Seattle, for four-story, 60x120-ft. hotel, store and lodge building for use of Chinese Masons. Estimated cost, $60,000.

Wash., Seattle—Plans being prepared by B. M. Pretica, Arch., for a 180x180-ft. reinforced-concrete natatorium building. Estimated cost, $250,000. C. D. Stimson, interested.

Wash., Tacoma—Knights of Columbus will build club house on C St. Estimated cost, $50,000.

Ore., Baker—Bonds for $125,000 voted for high school. Noted Nov. 18.

Ore., Portland—First Christian Congregation plans to build new church. Estimated cost, $50,000.

Calif., Los Angeles—Bids will be received until 9 a.m., Dec. 9, for group of buildings at Hooper and Compton Ave. and 38th St. to be known as Jefferson High School. Estimated cost, $200,000. Norman F. Marsh, Broadway Central Bldg., Arch. Noted Sept. 16.

Calif., Los Angeles—Loma Linda College of Medical Evangelists will build hospital, clinic and students' home. Estimated cost, $75,000.

Calif., Yosemite—Desmond Commissary Co. plans to build a hotel in Yosemite Valley. Estimated cost, $150,000.

Que., Hull—Plans being prepared for church for Sacred Heart Congregation. Estimated cost, $75,000.

Que., Maisonneuve—School Commission will build school to replace one destroyed by fire. Estimated cost, $400,000.

Que., Westmount—Kenneth G. Rea, Arch., will prepare plans for municipal building. Estimated cost, $150,000.

Ont., London—Plans being prepared for constructing an addition and altering building of Canadian Theaters Co. Estimated cost $100,000.

Ont., Orillia—Citizens defeated $50,000 bonds for city hall. Noted Nov. 4.

Ont., Toronto—Toronto Hydro-Electric Commission, 226 Young St., contemplates office building. Estimated cost, $450,000.

B. C., Vancouver—Plans prepared by F. Townley, Arch., St. Paul, for depot for Great Northern Railway. Estimated cost between $250,000 and $400,000.

B. C., Victoria—Election will soon be held to vote on $75,000 bonds for natatorium.

Bids In and Contracts Awarded

Mass., Danvers—All bids received for school on Maple St. rejected by Trustees of Essex County Agricultural School.

R. I., Providence—(Official)—General contract for school at Cole and Luzon Ave. awarded to W. WILLIAMS, Providence, at $118,000. Noted Nov. 11.

N. Y., Buffalo—Buffalo General Hospital awarded contracts for three-story, 55x80-ft. service building on High St. to BUFFALO STRUCTURAL STEEL CO., structural steel; CHARLES H. EVERITT, masonry. Estimated cost, $50,000.

N. Y., Buffalo—George Baker Long, Worcester, Mass., at $372,500, submitted lowest bid for general contract for four buildings for hospital for city at Grider St. and Kensington Ave. Noted Nov. 11.

N. Y., Mineola—Nassau County Trust Co. awarded general contract to HARTEL & DAVIES, 353 East 78th St., New York, for one-story bank building. Estimated cost, $75,000.

N. Y., Mt. Vernon—New York Central R.R. awarded contract for passenger station to R. H. HOWES CONSTRUCTION CO.

N. J., East Rutherford—Contract for school awarded to MAGEE CONSTRUCTION CO., Newark, N. J.

N. J., Roselle Park—(Elizabeth post office)—(Official)—Contract for three-story high school awarded to CHARLES FLOCKEN, Elizabeth, at $60,000. Noted Nov. 25.

Penn., Clearfield—School District of Clearfield awarded general contract to W. A. LUKINS, Clearfield, for two-story, 63x140-ft. high school. Estimated cost, $80,000.

Penn., Philadelphia—General contract awarded to JOHN McSHAIN, 1610 North St., for two-story, 64x121-ft. school and chapel for Parish of St. Carthage. Estimated cost, $40,000.

Penn., Pittsburgh—General contract awarded to ROSE & FISHER for five-story, 82x114-ft. community building for First U. P. Church. Estimated cost, $300,000.

Va., Norfolk—Contract for building for Park Place Methodist Church awarded to J. A. TURPIN, Norfolk.

N. C., Charlotte—Central Realty Co. awarded contract to TRAVERS-WOOD CO. for building on West Trade St. to be occupied by Buick Motor Co. and Overland Carolinas Co. Estimated cost, $50,000.

Ohio, Cincinnati—Contract for bank and office building for Provident Savings Bank and Trust Co. awarded to H. HARIG & CO., Cincinnati. Estimated cost, $100,000. Noted Sept. 23.

Ohio, Cleveland—General contract awarded to JAMES H. WELLS CO., Marshall Bldg., Cleveland, for two-story addition to McGregor Memorial Home for Aged at Terrace Ave. and Lee Rd. Estimated cost, $50,000. Noted Nov. 18.

Ohio, Columbus—Contract for homeopathic hospital at Ohio State University awarded to DAWSON CONSTRUCTION CO., May Bldg., Pittsburgh, Penn., at $40,000. Noted Nov. 11 and 25.

Ohio, Kilbourne—Contract for school awarded to L. R. DELAUDER, Marion, at $42,000.

Ind., Indianapolis—Contract for coliseum for city awarded to H. W. KLAUSMAN CO., at $123,660.

Mich., Holland—BYERS & CO., Kalamazoo, at $50,000, awarded contract for building for First State Bank.

Ill., Chicago—Contract for freight station for Pennsylvania R.R. awarded to GEO. A. FULLER CO. Estimated cost, $1,300,000.

Ill., Orcola—Board of Education awarded general contract to H. B. KRAUEL, Dale Bldg., Danville, Ill., for two-story high school. Estimated cost, $80,000.

Ill., Peoria—Contract for building for Merchants & Illinois National Bank at 217-19 South Adams St. awarded to V. JOBST & SONS. Estimated cost, $75,000.

Iowa, Sioux City—Contract for church at 19th and Nebraska St. for First Methodist Episcopal Church awarded to DUBEL & ANDERSON, 514 Jackson St., Sioux City. Estimated cost, $65,000.

Iowa, Sioux City—Contract for freight shed and terminal at Third and Jackson St. for Chicago & Northwestern Railway awarded to GIMBLE CONSTRUCTION CO., Chicago, Ill. Estimated cost, $185,000. Noted Oct. 14.

Minn., Duluth—General contract awarded to H. B. RICKETTS, Danville, Ill., for two-story, 120x200-ft. high school building. Estimated cost, $100,000. Noted Nov. 25.

Minn., St. Paul—Lowest bid received for Minnesota Historical Society building submitted by O. Swenson, St. Paul, at $463,155. Noted Sept. 23 and Oct. 28.

Neb., Omaha—Ford Hospital Co., 604 City National Bank Bldg., awarded general contract for three-story, 60x110 ft. hospital to BUSK & WIND, 543 Ramge Bldg. Estimated cost, $150,000.

Neb., Omaha—Coad Real Estate and Investment Co., 402 First National Bank Bldg., awarded general contract to ALEXANDER BECK, for three-story, 60x80-ft. hotel. Estimated cost, $40,000.

Mo., Kansas City—Contract for an addition to the German Hospital at 23rd, Holmes and McCoy St. awarded to PRATT-THOMPSON CONSTRUCTION CO., 500 Republic Bldg., Kansas City. Estimated cost, $250,000.

Mo., St. Louis—Riverview Club awarded contract to GILSONITE CONSTRUCTION CO. for three-story club house at 10,952 Riverview Dr.

Tex., Carlsbad—Texas Tuberculosis Sanitarium awarded contract for building to B. T. & C. N. DAVIS, Ft. Worth, Tex., at $58,312.

Tex., El Paso—Pitts & Denning, at $62,000 submitted lowest bid for building addition to Alta Vista School.

Tex., Palestine—Contract for high school awarded to A. W. FLINT, Ft. Worth, at $65,000. Noted Oct. 21.

Tex., San Antonio—Contract for building City and County Hospital awarded to H. N. JONES CONSTRUCTION CO., at $200,000.

Okla., Wilburton—Contract for court house awarded to A. EASLEY and H. R. HARDER, Wilburton.

Wash., Seattle—Board of Regents of University of Washington awarded general contract for home economics building to FINNE & GJARDE, 725 Northern St., at $143,254.

Calif., Berkeley—University of California awarded contract for stone work on Benjamin Ide Wheeler Hall to RAYMOND GRANITE CO., San Francisco, at $225,000. Noted Oct. 14.

Calif., Visalia—Southern Pacific Co. awarded contract for passenger depot to E. E. ETHERTON, Monadnock Bldg., San Francisco, at $43,000.

Ont., Toronto—(Official)—Contract for seven-story office building at Church and Court St. for Imperial Oil Co., Toronto, awarded to THOMPSON & STARRETT, 49 Wall St., New York, N. Y. Estimated cost, $150,000. Noted Nov. 4.

CALUMET SAG CHANNEL, CHICAGO, ILL.

Bids were received by the Sanitary District of Chicago, Oct. 12, for construction of Sections 13 and 14 of the Calumet Sag Channel from (A) Porter Bros. Co., Portland, Ore.; (B) A. Guthrie & Co., Inc., St. Paul, Minn.; (C) Winston Bros. Co., Minneapolis, Minn.; (D) Byrne Bros. Dredging and Engineering Co., Chicago; (E) Dunn-McCarthy Co., Chicago; (F) Marquette Construction Co., Chicago; (G) Schnable & Quinn, Chicago; (H) Bates & Rogers Construction Co., Chicago; (I) Flick Construction Co., Chicago; (J) Walsh Construction Co., Davenport, Iowa; (K) T. J. Forscher Contracting Co., Lemont, Ill.; (L) J. J. O'Heron & Co., Chicago; (M) Robert Grace Contracting Co., Pittsburgh, Penn.; (N) James O. Heyworth, Chicago. The item bids were as follows:

Section 13	A	B	D	E	F	H	I	J	K	O
500,000 cu.yd. glacial drift	$0.45	$0.33	$0.44	$0.36	$0.40	$0.45	$0.37	$0.3325	$0.37	$0.284
55,000 cu.yd. glacial drift at B. & O.-G. T. W. crossing	.60	.59	.79	.54	.85	.90	.52	.35	.50	.284
30,000 cu.yd. glacial drift at Rock Island crossing	.60	.59	.69	.52	.85	.90	.50	.35	.60	.284
60,000 cu.yd. solid rock	.95	.90	1.35	.85	1.15	.75	.98	.84	.90	.80
4,000 cu.yd. solid rock at B. & O.-G. T. W. crossing	1.75	1.75	1.60	2.00	1.50	1.25	2.00	1.75	1.25	.80
2,000 cu.yd. solid rock at Rock Island crossing	1.75	1.75	1.60	2.00	1.50	2.00	2.50	1.75	1.25	.80
50,000 sq.ft. channeling	.30	.30	.33	.30	.38	.45	.33	.35	.35	.40
500 sq.yd. rip-rap slopes	1.00	1.50	1.25	.50	1.00	2.00	1.25	1.38	2.50	2.50
2,500 cu.yd. number one concrete	7.50	6.50	12.75	6.50	9.00	8.30	7.75	7.40	7.50	7.50
1,500 cu.yd. number one concrete at B. & O.-G. T. crossing	8.00	7.10	12.75	6.50	9.00	7.45	9.25	7.40	8.50	7.50
200 cu.yd. number one concrete at Rock Island crossing	8.00	7.10	12.75	6.50	9.00	8.05	9.25	7.40	8.50	7.50
70,000 cu.yd. number two concrete	5.60	5.10	5.59	5.00	5.95	6.20	4.85	4.60	5.25	4.75
8,000 cu.yd. number two concrete at B. & O.-G. T. W. crossing	6.00	5.60	5.59	5.75	7.00	5.85	7.50	5.50	7.50	4.75
3,000 cu.yd. number two concrete at Rock Island crossing	6.00	5.60	5.59	5.75	7.00	6.45	7.50	5.75	7.50	5.15
80 cu.yd. coping concrete	11.50	8.00	15.00	7.00	14.00	11.00	11.00	8.00	10.00	12.00
40 cu.yd. granite concrete	12.00	9.00	16.00	10.00	18.00	13.00	12.00	9.00	15.00	18.00
5,000 cu.ft. concrete foundation columns	.60	.55	.50	.60	1.00	1.15	.75	.60	.50	.70
10,000 cu.ft. concrete cylinders at Rock Island crossing	.60	.55	.60	.60	1.00	1.10	1.00	.90	.60	.80
725 lin.ft. concrete railing	1.75	1.60	2.50	1.00	2.50	3.75	3.75	3.00	3.00	2.50
250,000 lb. reinforcing metal	.03	.035	.0350	.0325	.04	.0375	.0325	.0275	.04	.035
8,000 sq.yd. macadam pavement	1.75	1.10	1.25	1.50	1.25	2.25	1.25	1.00	1.50	1.25
3,000 sq.yd. cinder sidewalk	2.50	1.00	1.00	.75	.90	1.00	1.00	.20	.50	.60
Erection of Ann street bridge (lump sum)	3,400.00	3,100.00	3,720.00	1,500.00	3,100.00	3,500.00	3,410.00	3,390.00	3,500.00	3,410.00
Erection of Western avenue bridge (lump sum)	6,000.00	5,000.00	5,976.00	2,000.00	5,000.00	5,000.00	5,478.00	5,050.00	5,500.00	5,478.00
Erection of Chicago street bridge (lump sum)	3,700.00	3,100.00	3,720.00	1,500.00	3,100.00	3,500.00	3,410.00	3,640.00	3,750.00	3,410.00
Erection of Division street bridge (lump sum)	4,000.00	3,300.00	4,014.00	1,500.00	3,400.00	3,800.00	3,680.00	4,000.00	4,250.00	3,680.00
Stony Creek timber flume	8,500.00	10,000.00	5,000.00	10,000.00	7,000.00	10,500.00	9,500.00	10,800.00	12,000.00	10,260.00
Extended totals	$970,418	$798,490	$955,822	$794,310	$964,902	$991,033	$839,981	$747,640	$859,375	$720,170

Section 14	A	B	C	D	F	G	H
550,000 cu.yd. glacial drift	$0.42	$0.2825	$0.31	$0.37	$0.35	$0.415	$0.42
85,000 cu.yd. solid rock	.95	.80	.75	1.40	1.15	1.09	.76
60,000 sq.ft. channeling	.30	.25	.37	.33	.38	.432	.45
2,000 sq.yd. rip-rap slopes	1.00	1.50	2.00	1.25	1.00	1.50	2.00
7,000 cu.yd. number one concrete	7.50	6.40	6.25	12.75	9.00	6.56	8.65
80,000 cu.yd. number two concrete	5.60	5.00	4.85	5.59	5.95	5.83	5.68
120 cu.yd. coping concrete	11.50	8.00	12.00	15.00	14.00	6.70	13.50
3,000 cu.ft. concrete foundation columns	.60	.55	.90	.50	.95	.80	1.15
125 lin.ft. concrete railing	1.75	1.50	3.25	2.50	2.50	4.00	3.75
500,000 lb. reinforcing metal	.03	.03	.03	.035	.04	.045	.035
2,500 lin.ft. roadway construction	8.00	2.50	3.00	2.50	2.50	4.50	2.80
Ashland avenue bridge (fabrication and erection) (lump sum)	7,000.00	7,500.00	7,500.00	8,455.80	8,000.00	9,500.00	10,100.00
Controlling works road bridge (fabrication and erection) lump sum)	3,000.00	2,400.00	2,500.00	2,649.60	2,500.00	3,000.00	3,100.00
Controlling works foot bridge (fabrication and erection) lump sum)	1,500.00	1,400.00	1,500.00	1,584.00	1,500.00	1,600.00	1,900.00
Sector gates and collateral work (fabrication and erection) lump sum)	75,000.00	75,000.00	80,000.00	85,320.00	76,000.00	82,465.00	118,000.00
Miscellaneous work collateral to the controlling works (lump sum)	2,000.00	2,500.00	2,500.00	2,421.60	2,500.00	3,450.00	3,000.00
Miscellaneous work for transformer house and sewage discharge chamber (lump sum)	4,200.00	5,000.00	3,700.00	4,585.20	3,800.00	5,980.00	6,100.00
Electrical equipment (lump sum)	17,000.00	15,000.00	15,600.00	17,520.00	18,000.00	16,790.00	20,000.00
Ten-foot concrete sewer	30.00	25.00	30.00	40.00	30.00	37.85	36.40
Sewer junction (lump sum)	3,000.00	1,800.00	3,750.00	5,500.00	700.00	6,900.00	2,800.00
Additional structural steel, per lb	.05	.06	.0475	.052	.06	.043	.08
Additional machinery, steel and iron, per lb	.10	.14	.10	.108	.14	.09	.18
Additional steel castings, per lb	.09	.12	.09	.098	.12	.082	.16
Additional iron castings, per lb	.08	.07	.07	.077	.07	.063	.09
Additional bronze and babbitt, per lb	.75	.60	.55	.60	.60	.50	.75
Extended totals	$992,948	$828,822	$845,896	$1,049,448	$1,007,742	$1,041,391	$1,048,236

Section 14	I	J	K	L	M	N
550,000 cu.yd. glacial drift	$0.31	$0.35	$0.33	$0.30	$0.24	$0.247
85,000 cu.yd. solid rock	.78	.84	.85	.90	.64	.80
60,000 sq.ft. channeling	.33	.35	.35	.425	.24	.40
2,000 sq.yd. rip-rap slopes	1.25	1.28	2.50	1.10	1.25	2.50
7,000 cu.yd. number one concrete	7.90	7.00	7.50	8.00	9.00	7.50
80,000 cu.yd. number two concrete	5.00	4.60	5.00	5.55	5.95	5.00
120 cu.yd. coping concrete	11.00	7.20	10.00	10.00	15.00	12.00
3,000 cu.ft. concrete foundation columns	.75	.60	.50	.60	.50	.70
125 lin.ft. concrete railing	3.75	3.00	3.00	1.30	2.50	2.50
500,000 lb. reinforcing metal	.0325	.0275	.04	.03	.03	.035
2,500 lin.ft. roadway construction	2.70	2.00	2.00	2.00	2.25	2.00
Ashland avenue bridge (fabrication and erection) (lump sum)	8,154.00	8,850.00	10,000.00	8,000.00	6,375.00	8,400.00
Controlling works road bridge (fabrication and erection) lump sum)	2,588.00	2,575.00	3,000.00	2,500.00	1,900.00	2,800.00
Controlling works foot bridge (fabrication and erection) lump sum)	1,400.00	1,870.00	2,000.00	1,400.00	1,263.00	1,600.00
Sector gates and collateral work (fabrication and erection) lump sum)	78,040.00	96,440.00	75,000.00	87,000.00	77,770.00	80,000.00
Miscellaneous work collateral to the controlling works (lump sum)	2,247.00	2,780.00	3,500.00	3,500.00	2,143.00	2,742.00
Miscellaneous work for transformer house and sewage discharge chamber (lump sum)	4,957.00	6,210.00	7,000.00	6,000.00	3,453.00	4,400.00
Electrical equipment (lump sum)	17,000.00	15,000.00	15,000.00	15,500.00	16,060.00	16,000.00
Ten-foot concrete sewer	28.50	35.00	25.00	18.00	19.50	14,000.00
Sewer junction (lump sum)	29,95.00	3,000.00	3,500.00	1,500.00	1,000.00	3,000.00
Additional structural steel, per lb	.05	.06	.05	.06	.043	.06
Additional machinery, steel and iron, per lb	.12	.15	.09	.15	.09	.14
Additional steel castings, per lb	.12	.12	.10	.12	.082	.12
Additional iron castings, per lb	.08	.08	.07	.06	.063	.10
Additional bronze and babbitt, per lb	.70	.60	.55	.60	.50	.60
Extended totals	$868,007	$874,174	$887,325	$923,522	$882,741	$844,644

CATALOG NOTICES

Tippett & Wood, Phillipsburg, N. J. Catalog. Water towers, stand pipes, etc. Illustrated, 62 pp., 5½x8½ in.

M. Smolensky Mfg. Co., Cleveland, Ohio. Catalog. Suction and check valves. Illustrated, 16 pp., 6x9 in.

The James Leffel & Co., Springfield, Ohio. Catalog No. 65. Steam engines and boilers. Illustrated, 32 pp., 8½x11 in.

Harrison Safety Boiler Works, Philadelphia, Penn. Pamphlet. "Finding and Stopping Waste in Modern Boiler Rooms by Use of Cochrane Meters." Illustrated, 68 pp., 6x9 in.

Union Iron Works, Hoboken, N. J. Catalog No. 34. Pile driving machinery. Illustrated, 126 pp., 7x10 in.

The Richardson-Phenix Co., Milwaukee, Wis. Bulletin No. 50. Phenix force feed lubricators. Illustrated, 12 pp., 8½x11 in. Bulletin No. 60. Richardson Model M sight feed oil pump. Illustrated, 20 pp., 8½x11 in.

Warren-Knight Co., 136 N. 12th St., Philadelphia, Penn. Booklet. "Facts Concerning Sterling Transits and Levels." Illustrated, 24 pp., 4x7 in.

The Foxboro Co., Foxboro, Mass. Bulletin No. 98. Recording gauges for all purposes. Illustrated, 40 pp., 8x10½ in.

The Gardner Governor Co., Quincy, Ill. Pamphlet. "Helpful Hints on Air Compressor Installations." Illustrated, 8 pp., 4x9 in.

Allis-Chalmers Mfg. Co., Milwaukee, Wis. Bulletin No. 1097. Power transformers. Illustrated, 24 pp., 8x10½ in. Bulletin No. 1636. Hydraulic turbines and accessories. Illustrated, 56 pp., 8x10½ in.

Contracts to Be Let

Bids received until Dec. 14, 1915.

Drainage Works

Tempe, Ariz.

The Board of Directors of Drainage District No. 1, of Maricopa County, Arizona, will receive sealed bids for the construction of the portion of the proposed drainage works, hereinafter particularly described, until 2 o'clock p.m., Tuesday, December 14, 1915, at the office of the Board, at Tempe, Arizona.

The portion of the work for which bids will be received consists:

First: Of a main open drain ditch, approximately 8.4 miles in length; the upper or Northerly portion thereof approximately 40,350 feet in length, having a depth of from 6 feet to 12.5 feet, and the lower or Southerly portion thereof approximately 4,000 feet in length, having a depth of from 6 feet to 1 foot.

Said ditch begins at a point about 100 feet South and 55 feet East of the Northwest corner of Section 35 in T. 1 N. R. 4 E. in Maricopa County, Arizona, and extends South to a point near the East quarter of Section 22 T. 1 S. R. 4 E.; thence in a Southwesterly direction to Culvert B 16 on the line of the Arizona Eastern Railroad.

Second: Eleven structures consisting principally of reenforced concrete to be installed at various points where the line of the proposed ditch intersects highways, canals and ditches.

The portions of the work above referred to are particularly described in the drawings and specifications therefor adopted by said Board, which are hereby referred to for a more particular description of the work.

Each bid must be submitted on form furnished by the Board for that purpose and accompanied by a certified check, payable to Alfred H. Oeltjen, Secretary of the Board, for 5% of the gross amount of the bid.

Drawings and specifications for the above work are on file and can be seen at the office of the Board and at the office of the Engineer, L. G. Knipe, 16 South Second Avenue, Phoenix, Arizona, and bidders may obtain sets of these upon application and payment of $10.00.

The bids will be opened at the office of the Board at 2:00 o'clock p.m., Tuesday, December 14, 1915, and the contract will be let to the lowest responsible bidder, but the Board expressly reserves the right to reject any or all bids, or any part of any bid.

Dated at Tempe, Arizona, November 12, 1915.

J. W. MILLER,
ALFRED H. OELTJEN,
I. M. SAYLOR,
Board of Directors, Drainage District No. 1.

Bids received until Dec. 11, 1915.

Aluminum Sulphate

OFFICE OF SUPERINTENDENT CITY WATER WORKS,
Room 112, City Hall.

Richmond, Va.

Sealed proposals will be received at this office until 12 M. December 11, 1915, for furnishing this department with aluminum sulphate, high basicity for water clarification, containing seventeen per cent. aluminum oxide, delivered f. o. b. Korah Station, Chesapeake and Ohio Railway, in barrels, at such time and in such quantities as the superintendent may require. Bidders are requested to bid on one, two and three years' contract. Estimated quantity eight hundred (800) tons per year.

Further information can be obtained at this office. The Administrative Board reserves the right to reject any or all proposals or any part of any or all proposals, also to increase or decrease the specified quantities twenty per cent.

A certified check for two hundred dollars, payable to the City Treasurer, must accompany each bid.

Proposals must be submitted in sealed envelopes, containing the name and address of the bidder, directed to the Administrative Board, and in the lower left-hand corner must be written "Proposals for Aluminum Sulphate."

Bond will be required on contract.

E. E. DAVIS, Superintendent.

Bids received until Dec. 21, 1915.

Mont Clare Bridge Over Schuylkill River

BETWEEN PHOENIXVILLE AND MONTCLARE, PENN.

Sealed proposals will be received by the Commissioners of Montgomery and Chester Counties, at the County Commissioners' Office, Norristown, Pennsylvania, until 10 A.M., December 21, 1915, for the construction of a reinforced-concrete arch bridge of five spans over the Schuylkill River, connecting Phoenixville and Mont Clare, Pennsylvania.

The plans and specifications including form of proposal and bond may be seen at the County Commissioners' Office, Norristown, Pennsylvania, and at the County Commissioners' Office at West Chester, Pennsylvania, and at the offices of "Engineering News" and "Engineering Record," in New York City.

Copies of the plans and specifications may be obtained from the Consulting Engineer, B. H. Davis, Whitehall Building, No. 17 Battery Place, New York City, upon deposit of Twenty-five ($25.00) Dollars, which sum will be refunded upon the return of all papers in good condition.

Each proposal must be accompanied by a certified check drawn to the order of the Commissioners of Montgomery and Chester Counties for the lump sum of Five Thousand ($5,000.00) Dollars, and by a guaranty signed by an acceptable surety company, in separate enclosures, that the bidder will, if awarded the contract, enter, within ten days, into a contract, and furnish satisfactory surety company bond for the construction of the bridge.

The certified checks of the unsuccessful bidders will be returned as soon as the contract is awarded. A satisfactory surety company bond for seventy-five (75%) per cent. of the contract price will be required of the successful bidder.

All regular proposals accompanied by certified checks and guaranties in separate enclosures, received at 10 A.M. will be publicly opened and the bids tabulated at 11 A.M., December 21, 1915, in the County Commissioners' Office, Norristown, Pennsylvania. The right is reserved to reject any and all bids or parts thereof not deemed to the advantage of the Counties.

JOHN N. JACOBS,
Controller of Montgomery County.
ISAAC Y. ASH,
Controller of Chester County.

Bids received until Dec. 8, 1915.

Mullica River Bridge

Atlantic City, N. J.

Sealed proposals will be received for building a bridge, 742 feet long, composed of creosoted pile trestle approaches, steel trusses and bascule draw span with wood block floor and concrete substructure, over the Mullica River at Chestnut Neck, near New Gretna, N. J., according to plans and specifications on file with the Engineers for Atlantic and Burlington Counties. The bids will be received by the Boards of Chosen Freeholders of the Counties of Atlantic and Burlington at the G. A. R. Hall, New York Ave., Atlantic City, N. J., at 12 o'clock noon on Wednesday, December 8th, 1915, and opened immediately thereafter.

Plans and specifications may be obtained from A. H. Nelson, Guarantee Trust Building, Atlantic City, N. J., or from James Logan, Mount Holly, N. J., by depositing $5.00. This sum will be refunded if plans and specifications are returned in good condition by 12 o'clock noon, December 9th, 1915, otherwise not.

The right is reserved to reject any or all bids.

A. H. NELSON,
Atlantic County Engineer.
JAMES LOGAN,
Chairman Atlantic County Bridge Committee.
Burlington County Engineer.
JOHN K. JOHNSON,
ALFRED I. DAVIS,
Director, Burlington County.